The Effect of Comparative FonF Structure on Learning L2 Verb Components

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Abstract

This study focuses on the impact of the type of form-focused instruction (FFI) on its efficiency in mastering L2 forms. The hypothesis that FFI, which induces structural and metalinguistic salience on the basis of contrastive analysis of the learner’s L1 and L2, would be particularly effective at facilitating the acquisition of difficult L2 forms was tested in a quasi-experimental study comparing the effectiveness of two types of FFI, one with and one without a contrastive component. The contrastive FFI explicitly drew learners’ attention to the cross-linguistic differences in the tense-aspect systems of their L2 and L1 while the non-contrastive treatment only focused on the tense-aspect system of the L2. The effects of these two types of FFI were assessed by analyzing the learners’ pre-test and post-test performance on two tasks differing in the extent to which they involve the activation of explicit and implicit linguistic knowledge: a grammatical judgment task and a controlled translation task. The subjects of the study comprised of 43 students majoring in English language in the Iranian capital university, Tehran, 22 were selected as for experimental group and 21 for control group randomly. The results of the study revealed that the quantitative analysis of the Grammatical Judgment Test (GJT) data indicated no significant effect of CFFI due to the novelty of the translatory technique, or the potential individual differences in the learning orientation of the learners. On the contrary, the qualitative analysis indicated differential effects of this type of FFI according to the nature of target form, i.e. CFFI was beneficial in raising the grammatical judgment of Persian Learners of English (PLE) regarding present perfect form but not effective in their judgment of ungrammatical progressive forms. In terms of translation task, the CFFI appeared to be effective in the correct use of the target structures by PLE. This may be mainly due to the fact that Translation Test (TT) needed explicit knowledge which was presented in CFFI and that translation is a contrastive activity in nature.

Keywords: foreign language teaching, form-focused instruction, contrastive form-focused instruction, tense and aspect, translation, grammatical judgment

1. Introduction

There is now substantial theoretical and empirical evidence to suggest that instruction can have an effect on L2 acquisition but also that the effectiveness of instruction is dependent on a number of factors, including the type of learner, the type of language knowledge or skill targeted and the type of instruction provided (Hulstijn and De Graaff, 1994; Norris and Ortega, 2000; Ellis, 2001, 2002 a,b, 2004, 2005; Housen and Pierrard, 2005; De Graaff and Housen, 2009). This study deals with the last factor namely the type of instruction. Based on a meta-analysis of the results of several experimental and quasi-experimental studies, Norris and Ortega (2000) conclude that the most effective type of instruction tends to be form-focused instruction, particularly the more explicit types of it. Form-focused instruction (FFI) has been defined as “[any] pedagogical effort used to draw the learner’s attention to language form either implicitly or explicitly; spontaneously or pre-determined” (Spada, 1997:73).

The rationale for FFI draws on the assumption that certain forms of language may go unnoticed in the input unless the learner’s attention is somehow drawn to them so that he reaches the critical level of awareness (noticing) which is required for language features to be internalized (Schmidt, 2001; Robinson, 2001). FFI can take many forms, from implicit instructional activities such as input flooding, input enhancement techniques and recasts to increasingly
more explicit activities like controlled focused exercises, overt error correction and the presentation and discussion of metalinguistic rules (Sharwood Smith, 1993; Norris and Ortega, 2000; Housen and Pierrard, 2005; De Graaff and Housen, 2009). The most explicit forms of FFI are characterized by the fact that they include a clear metalinguistic component; that is, they involve the presentation, explanation and/or practice of *meta-linguistic* rules or descriptions.

Findings from classroom research with young learners, as well as SLA research and theory involving older learners, confirm that the features learners are most likely to have long term difficulty acquiring are those in which there is a misleading similarity between the L1 and the L2. For example both English and French have possessive determiners but since their application rule is different, francophone learners of English have problems using them (Doughty and Williams 1998, Han and Selinker, 1999, Spada, Lightbown and White 2005). This suggests that these are the L2 features that are most likely to require FFI. In order for learners to overcome their difficulties with these features, it has been hypothesized that it may be necessary to provide instruction that is not only explicit with regard to the L2, but that also draws attention to the specific differences between the L1 and L2 (Spada and Lightbown, 1999; Spada, Lightbown and White 2005).

SLA research has recently shown an interest in the value of *contrastive FFI* (CFFI) (Lauffer, B. Girsai, N. 2008; Horst M., White J., Bell P. 2010; Ammar, A., Lightbown, P. Spada, N. 2010). CFFI here does not refer to bilingual glosses which simply state the meaning or function of L2 words and structures, but to the kind of instruction which leads to learners’ understanding of the similarities and differences between their L1 and L2 in terms of specific forms (phonemes, morphemes, words, patterns, etc.) and the overall phonological, morphological, lexical or grammatical systems. For example, in the case of French learners of L2 French, a bilingual gloss would translate French *Imparfait* constructions such as *Je dormais* and *Je regardais la télévision* as I was sleeping and I was watching television, respectively. Teachers using CFFI, on the other hand, would point out that the French *Imparfait* and the English (Past) Progressive forms, while related in some respects, do not fully overlap semantically, grammatically nor pragmatically, and they would provide explanation and practice of not only the similarities but, crucially, also the differences between the French and the English verb forms. CFFI, too, can take different forms, including various kinds of interlingual comparisons with learners’ L1, translation, or providing learners information about the particular difficulties resulting from L1-L2 differences. Claims about the putative effectiveness of FFI which entails comparison with the L1 and translation are based on several instructional theories that explain effectiveness in L2 learning in general, including the noticing hypothesis and the comprehensible output hypothesis (Lauffer, 2005).

The relative dearth of studies investigating the effectiveness of CFFI is somewhat surprising. As contrastive analysis (CA) was ‘rehabilitated’ almost thirty years ago, when it took on a cognitive turn (Ringbom, 1987; Kupferberg, 1999), one could have expected to see an increased interest in investigating the connection between overcoming learning difficulties and heightening the learners’ awareness on the one hand and the differences between L1 and L2 (CA) was ‘rehabilitated’ almost thirty years ago, when it took on a cognitive turn (Ringbom, 1987; Kupferberg, 1999), one could have expected to see an increased interest in investigating the connection between overcoming learning difficulties and heightening the learners’ awareness on the one hand and the differences between L1 and L2. As James (2005) points out, in the cross-linguistic influence (CLI) framework, the role of CA is to define salient foreign language input which may assist L2 learners by raising their cross-language awareness. Moreover, since providing cross-linguistic information is a clear case of focus on form (Ammar and Lightbown, 2005), it seems natural that FFI research should extend to cross-lingual instruction. However, only a handful of empirical studies have been conducted on the effects and effectiveness of CFFI so far. The results of these studies are still inconclusive. Some showed that providing learners with cross-linguistic information proves to be effective in the instruction of some selected structures but less so in the case of others (Kupferberg and Olshtain, 1996, and Kupferberg, 1999, for question formation by French learners of English; Ammar and Lightbown, 2005, for relative clauses by Arabic learners of English; Spada, Lightbown and White, 2005, for interrogatives and possessive determiners by French learners of English; Sheen, 1996, 2005, for interrogatives and placement of frequency adverbs by French learners of English, Vaezi and Mirzaie, 2007 for passive voice, indirect speech and conditionals by Persian Learners of English). In sum, the small number of studies available and the differences between the studies in terms of the types of CFFI provided, research designs and measurements used, make it difficult to draw any strong conclusions about the effectiveness of CFFI relative to other types of instruction.

Having referred to the above moves, the present study is an attempt to help fill the empirical hiatus in this domain of the study. It seeks to answer to the following research questions:

**Q1.** Does the CFFI of the English and Persian Tense-Aspect system lead to any progress in the explicit metalinguistic knowledge of the Persian Learners of English represented in the accuracy of their grammatical judgments?

**Q2.** Does the CFFI of the English and Persian Tense-Aspect system lead to any progress in the implicit metacognitive knowledge of the Persian Learners of English represented in the accuracy of their translations?
Q3. Is the effect (and effectiveness) of CFFI vs. non-CFFI mediated by the specific properties of the grammatical form targeted by the instruction?

2. Methodology

2.1 Target Structures

For the purpose of this study, three different cases in the domain of tense-aspect which are the source of frequent and persistent learner errors and learning problems were chosen. These target structures were the overgeneralization of progressive morphology with state verbs (hereafter OPS), the use of present perfect with definite past adverbials (hereafter PPWPA) and the use of present perfect with locative state verbs (hereafter PPWLS) with present simultaneous reading (Afraz & Ghaemi, 2012; Smith, 2001; Manucherhri, 1976).

Progressive states are considered ill-formed in many languages including English and Persian. A very typical problem that Persian Learners of English (PLE) face is the misconception, generally taken for granted by these learners, that the English progressive marker (-ing) is semantically and functionally fully equivalent with the progressive marker (mi-) in Persian. For example, a typical question asked by PLE is why it is ungrammatical to say “I am knowing” in English while the translational equivalent construction in Persian, “man midanam”, is grammatical. The erroneous association of “ing” with “mi” leads to erroneous uses of progressive states in the interlanguage of PLE.

A second problem concerns the differences between Persian and English in the compatibility of the present perfect with definite past time adverbials. The present perfect form of the verb in Persian (as in several other languages such as Dutch and German) may be used with definite past time adverbials, thus marking past time. In English, however, definite past time adverbials are incompatible with the present perfect tense form and can only be used with past tense verb forms.

The third and last contrast and potential source of learning problem concerns the fact that English locative verbs (e.g. sit, stand, lie, sleep) in the progressive form can have both a resultative and a non-resultative reading. The resultative reading is evoked when the change of state has already taken place while in the non-resultative reading, the thematic agent is about to change (or has started changing) his/her position. In English, this difference is usually expressed lexically by adding a preposition to the verb. In Persian, a locative verb in the progressive form only yields a non-resultative reading. The resultative meaning is evoked in combination with the present perfect form. The following examples clarify the differences:

**Resultative reading**

(1) Persian: oo rooye sandali neshaste ast.
Literal Translation: He on chair has sat.
English: He is sitting on the chair.

**Non- Resultative reading**

(2) Persian: oo daarad rooye sandali mineshinad.
Literal Translation: He -progressive marker- on chair is sitting.
English: He is sitting (down) on the chair.

As may be seen in the above examples, when the resultative reading is intended, the forms of locative verb are not the same in the Persian and English structures (present perfect in Persian and present progressive in English); thus, the erroneous use of PPWLS which appears in the interlanguage of PLE was chosen as one of the target structures in the CFFI. To investigate whether the instruction that explicitly focuses on these cross-linguistic contrasts in the L1 and L2 can help the learners to overcome these learning problems, the following design was followed.

2.2 Design

The plan was to consider the effect of contrastive instruction of the contrastive domains (OPS, PPWPA and PPWLS) on the PLE’s ability to perform two different types of tasks: (a) their ability to make grammatical judgments, and (b) their proficiency in using these forms in translations from Persian to English. The choice of these two tasks was motivated by different reasons.

There is much debate in the literature about the type of knowledge the Grammatical Judgment Test (GJT) may really evaluate (i.e. implicit, explicit or metalinguistic as a special type of explicit). Following Ellis and Barkhuizen (2005),
who hold that a ‘timed’ GJT measures implicit knowledge and the ‘untimed’ GJT task serves as a measure of explicit knowledge, so the untimed GJT was chosen in this study to evaluate the learners’ metalinguistic knowledge of verbs. The Translation Test (TT) was chosen because of its integrative nature. It is assumed that translation activates a combination of explicit metalinguistic knowledge, explicit non-metalinguistic (or analyzed) knowledge as well as implicit knowledge (Bialystok 1994; Ellis, 2004; De Graaff and Housen, 2009).

The control group received explicit metalinguistic instruction on the three target structures in the L2 only. The experimental group received explicit metalinguistic instruction on the three target structures in the L1 (Persian) and the L2 (English) with a special focus on the contrasts between the two languages. Both groups performed the tasks twice, once before the instructional treatment and once after the treatment. Figure (1) gives a schematic overview of the study design.

![Figure 1. The Schematic Representation of the Study](image)

2.3 Subjects

Subjects for this study were randomly chosen from Iranian freshman year college students, both male and female, majoring in English at a university in the Iranian capital, Tehran. The two randomly chosen classes had respectively 22 and 21 students (N=43) at the onset of our study. In order to control for possible intervening variables, students who had learned English in a second-language setting (rather than a foreign language one) and those who spoke another language than Persian as their L1 were excluded from the analysis. The two groups were linguistically homogeneous (having comparable level of English Proficiency equal to B1 level in the European framework tested through a mock TOEFL test) and the subjects belonged to the same age group (the age range was 18-23 years with the average of 19).

2.4 Instruments

2.4.1 Grammatical Judgment Test (GJT)

The untimed GJT was intended to evaluate the metalinguistic knowledge of PLE and to trace signs of L1 transfer in their judgments regarding OPS, PPWPA and PPWLS with present simultaneous reading. However, the first area, the overgeneralization of progressive morphology with state verbs, posed a number of specific methodological challenges.

Several authors claim that the use of stative progressives (e.g. Are you wanting your suitcase down?) is, in fact, a relatively common phenomenon in adult native speech (Dowty, 1979; Smith, 1983; Shirai, 1994; Andersen and Shirai, 1996). Smith (1983) holds that although sometimes these stative progressives are referred to as illformed, conversational or informal, they are quite natural and grammatical. Shirai (1994) further states that since it is often difficult to determine which uses of stative progressive are grammatical or ungrammatical, it is not an easy task to determine which occurrences in the speech of non-native speakers are actually examples of overgeneralization. Since only norms based on real language production of real speakers are valid, it was decided to survey the judgments of native speakers of English (NS) reflecting their intuitions about assumed ‘problematic’ instances of English verbs in the progressive form. To this end, a questionnaire was developed to establish a NS benchmark for the use of the progressive with stative verbs. First a list of verb predicates which may not be used in the progressive form in English was compiled from Lakoff (1965), Vendler (1967), Dowty (1979), Smith (1983) and Shirai (1994). On the basis of this list, 26 sentences with state verbs in the progressive form were chosen as the content of a questionnaire. This questionnaire was given to two groups of monolingual English native speakers. Group A consisted of 16 university students at a US university in the age range of 21-24 years, and Group B included 16 monolingual native English speakers with academic degrees at the same university, in the age range of 40-60. This group included university lecturers, administrative workers and graduate students. Two different age ranges were chosen in order to investigate the possibility of age-related differences in the acceptability of progressive states.
The subjects were asked to mark each sentence as (a) grammatical or ungrammatical, and (b) as acceptable or unacceptable for use. The percentage results of the survey are in Table 1. In this analysis, a progressive verb was considered to be acceptable if at least 50% of the participants in a group had accepted it as both grammatical and acceptable. The results indicate a “change in progress” in the English language in that the younger group of informants (group A) are more tolerant of the use of the Progressive with these verbs than the older group (group B). Finally, 10 stative verbs were identified for which there was a consensus in both groups that they were not compatible with progressive morphology in English. These verbs were: consist, suppose, understand, belong, deserve, lack, possess, prefer, hear and taste.

| No | Verbs  | Group A (Age range 21-24 years) | Group B (Age range 40-60 years) |
|----|--------|---------------------------------|---------------------------------|
|    |        | Ungrammatical | Unacceptable | Ungrammatical | Unacceptable |
| 1  | Consist| 81.25           | 56.25          | 100          | 87.50          |
| 2  | Impress| 50              | 18.75          | 87.5         | 56.25          |
| 3  | Please | 50              | 12.5           | 75           | 56.25          |
| 4  | Doubt  | 50              | 25             | 56.25        | 43.75          |
| 5  | Imagine| 43.75           | 6.25           | 18.75        | 37.5           |
| 6  | Remember| 18.75          | 12.5           | 12.5         | 18.75          |
| 7  | Suppose| 93.75           | 93.75          | 100          | 100            |
| 8  | Understand| 87.5          | 56.25          | 93.75        | 93.75          |
| 9  | Belong | 100             | 81.25          | 93.75        | 93.75          |
| 10 | Deserve| 93.75           | 68.75          | 93.75        | 81.25          |
| 11 | Include| 62.5            | 18.75          | 62.5         | 56.25          |
| 12 | Involve| 25              | 12.5           | 18.75        | 6.25           |
| 13 | Lack   | 93.75           | 62.5           | 68.75        | 75             |
| 14 | Possess| 100             | 87.5           | 93.75        | 100            |
| 15 | Resemble| 62.5           | 50             | 56.25        | 56.25          |
| 16 | Believe| 62.5            | 31.25          | 68.75        | 68.75          |
| 17 | Prefer | 56.25           | 56.25          | 68.75        | 68.75          |
| 18 | Hear   | 87.5            | 56.25          | 68.75        | 68.75          |
| 19 | Smell  | 43.75           | 31.25          | 81.25        | 50             |
| 20 | Taste  | 87.5            | 56.25          | 87.5         | 81.25          |
| 21 | Hate   | 43.75           | 18.75          | 62.5         | 62.5           |
| 22 | Seem   | 50              | 37.5           | 62.5         | 50             |
| 23 | Like   | 18.75           | 12.5           | 37.5         | 18.75          |
| 24 | Love   | 75              | 37.5           | 68.75        | 56.25          |
| 25 | Consider| 12.5           | 0.0            | 12.5         | 6.25           |
| 26 | Expect | 0.0             | 6.25           | 18.75        | 6.25           |

A t-test analysis indicated that there is no statistically significant difference between the rate of progressive verbs marked as grammatical by group A and B (p = 0.523). Yet the difference between the number of progressives marked as acceptable by the two groups is statistically significant (p = 0.006). This suggests that both groups share a similar (normative) linguistic knowledge of the grammatical collocatability of (-ing) and individual verb lexemes, but that the younger American NSs are more lenient in terms of norms of actual language use. The results of this survey provided a usage-based criterion to evaluate the responses of our PLE to sentences containing overgeneralizations of the progressive marker in English and served as a basis for designing the relevant items on the GJT.
Because of practical reasons, the number of items in the GJT had to be capped at 25. These 25 items included 16 ungrammatical sentences (10 for OPS, 3 for PPWPA and 3 for PPWLS). The remaining 9 items were grammatical sentences (3 for OPS, 3 for PPWPA and 3 for PPWLS). Ideally, a GJT includes a balanced number of grammatical and ungrammatical items, but this was not possible due to constraints on the time available for administering the pre- and post-tests.

Some sample examples of the test items are presented below.

- This group is consisting of both Democrats and Republicans. (OPS)
- He has broken his leg in an accident last year. (PPWPA)
- I have sat here and I am listening to the radio. (PPWLS)

The subjects were asked to write the number of grammatically well-formed sentences on their answer sheets. The final score of each subject was calculated by subtracting the number of incorrect choices from the number of correct choices.

2.4.2 Translation Test (TT)

The other test used was a translation test (TT). This test included eleven different short paragraphs in Persian providing sufficient context for the intended aspectual meaning of the target predicates to be clear. The verbs were chosen in such a way that their translation into English required them to appear in either the progressive or present perfect form. The goal was to trace signs of transfer in the translation of these contextualized verbs from Persian to English. The same three types of cross-linguistic differences as in the GJT were in focus in the translation task.

In order to examine the concurrent validity of the translation task, the test was administered with the grammar section of a Mock TOEFL test in a small class of PLE in their fourth term of study. These learners had more or less the same characteristics as the participants of the main study and were studying at the same Iranian university. The results were correlated, and the high degree of the correlation (0.8) was an indication of the concurrent validity of the TT.

2.5 Treatment

Both the GJT and the TT were administered to both groups as a pre-test. Then both groups received the instructional treatment (see table 2 for a summary). This treatment lasted two weeks and consisted of four class sessions of 90 minutes for each form in focus. Following Ellis (1994:136) that “…implicit and explicit modes of operation interact in interesting ways…. and demonstrate that a blend of explicit instruction and implicit learning can be superior to either just explicit instruction or implicit learning alone”, a mixture of implicit and explicit instructional activities was used for the instructional treatment in this experiment. Table 2 summarizes the treatment procedure.

| Table 2. Instructional Treatment of the Control and Experimental Groups |
|---------------------------------------------------------------|
| **Presentation** | **Practice** | **Feed back** |
| Implicit input flooding (1st session) | Out-put oriented practice | |
| Explicit instruction of target forms in l2 (2nd session) | Error avoiding | Overt |
| Explicit instruction of cross-linguistic differences (3rd session) | Text manipulation | Metalinguistic |
| Implicit input flooding (1st session) | Text creation (through the application of the contrastive technique) (4th session) | Focus on errors repetition |
| Experimental | | |
| Control | | |
| Implicit input flooding (1st session) | Out-put oriented practice | Overt |
| Explicit instruction of target forms in l2 (2nd session) | Error avoiding | Metalinguistic |
| Explicit instruction of target forms in l2 (3rd & 4th sessions) | Text manipulation | Focus on errors repetition |
The instructional treatment of the control group was identical to that of the experimental group except for the third and fourth sessions. The third and the fourth sessions (which were devoted to CFFI and the translatory technique in the experimental group) were spent on more text construction practice in the control group. Exactly the same treatment procedure as for the progressive was applied once more, immediately after the four-session period of the progressive treatment; this time focusing on the present perfect for the following subsequent sessions. Eight weeks after completion of the second instructional treatment (the present perfect), a period during which both groups were taught other English forms; all the subjects in both groups took part in both the GJT and TT. During the interval period between the treatment and the post-test, the subjects in both groups received further corrective feedback dealing with the progressive aspect and present perfect tense whenever needed.

3. Results

3.1 The Grammatical Judgment Test

The data obtained from the GJT was used for both a quantitative and a qualitative analysis. As for the quantitative analysis LeVee’s test of equality of variances indicated that the control and experimental groups were comparable in terms of their grammatical intuitions before the instructional treatment ($F_{x,y} = 0.319$, $p = 0.05$). To analyze the instructional effect, several clusters of mean scores were compared by means of the t-test. These t-tests compared the mean scores of the post-tests of the two groups, the mean scores of the pre- and post-tests of the control group, the mean scores of the pre- and post-tests of the experimental group, the mean scores of the correct choices in the pre- and post-tests of each group separately, the mean scores of the incorrect choices in the pre- and post-tests of each group as well as the mean scores of the correct and incorrect choices of the two groups in the pre-tests and post-tests. None of the calculated t-values had a significance level lower than $p = 0.05$. In other words, for neither group was there a statistically significant difference between the pre-test and post-test scores, i.e., none of the two instructional treatments compared in this study affected the PLE’s judgments in any significant way.

As explained before, the final score of each subject was calculated by subtracting the number of incorrect choices from the number of correct choices. This type of scoring has the advantage of incorporating the number of incorrect choices in the final score. However, it also obscures several potentially relevant differences in the response patterns of the subjects. For example, two learners who have both obtained a score of 4 on the GJT will receive identical treatment in the statistical analysis although the first one may have given 4 correct answers and no incorrect one ($4-0= 4$) while the second learner may have chosen 9 correct sentences plus 5 ungrammatical structures ($9-5= 4$). In other words, two learners may end up with the same score but still differ in the number of correctly and incorrectly identified grammatical and ungrammatical sentences. Therefore, it was decided to analyze the individual response patterns as well, focusing on the incorrect responses that the learners gave.

Having referred to Table 3, the qualitative analysis revealed that more than half (52%) of all the control group learners became more accurate in judging the ungrammaticality of the targeted progressive states, as opposed to only 16.6% of the experimental group learners. Again it can only be speculated as to why the control group learners overall outperformed the experimental learners. Recall that while the experimental group received instruction on cross-linguistic differences between their L1 and L2, the control group spent the same time on exercises and practice. During the practice, the control learners probably received more overt feedback. Thus the increased accuracy with which many of the control group learners judged progressive states may be an indirect result of the extra practice and feedback which they received. Satisfactory though the above explanation may seem, it appears to be immediately contradicted by the findings for the other two structures investigated, namely the use of the present perfect with locative states and past time adverbials. Here the general trend observed for the progressive states is somewhat reversed.

As for the erroneous use of present perfect with locative state verbs which entails resultative meaning, the contrastive instructional treatment proved to be more effective than in the case of the progressive states as 43% of the learners in the experimental group became more accurate in identifying this structure as being unacceptable. Interestingly, this percentage for the control group was only 18%. In other words, the largest learning gains here are observed for the contrastive treatment.

The results observed for the present perfect with past time adverbials is yet different. A similar percentage of the experimental and control learners became more accurate at identifying this target structure as ungrammatical (20% and 18% respectively) but more than half (64%) of the control learners became actually less accurate as opposed to only 20% of the experimental learners. Although the effect of the instructional treatment is not as clear as in the case
of the locative states, overall the experimental (contrastive) treatment seems to have had beneficial effect on learners’
grammatical judgments in this regard.

Table 3. Overview of the Changes in the Response Patterns on the GJT from Pre-test to Post-test for the three Target
Structures (qualitative analysis)

| Group          | Type of Error                  | No change | Less accurate | More accurate |
|----------------|--------------------------------|-----------|---------------|---------------|
| Control 1      | Progressive with State         | 24%       | 24%           | 52%           |
|                | Perfect with Locative State    | 19%       | 62%           | 19%           |
|                | Perfect with Past Adverbial    | 18%       | 64%           | 18%           |
|                | Progressive with State         | 35%       | 47%           | 16.6%         |
| Experimental   | Perfect with Locative State    | 38%       | 19%           | 43%           |
|                | Perfect with Past Adverbial    | 60%       | 20%           | 20%           |

3.2 The Translation Test

All the erroneous verb forms produced in both pre- and post-tests were marked and the errors belonging to the three
categories of OPS, PPWLS (with present reading) and PPWPA were counted (Table 4).

Table 4. The Token Count of Different Types of Errors in the TT Data

| Group          | Experimental | Control |
|----------------|--------------|---------|
| Test           | Pre | Post | Pre | Post |
| Over-generalized Progressive States (OPS) | 18  | 10  | 24  | 21  |
| Present Perfect with Past Adverbial (PPWPA) | 21  | 5   | 17  | 9   |
| Present Perfect with Locative States (PPWLS) | 37  | 27  | 30  | 23  |
| Other Errors   | 134 | 95  | 133 | 91  |
| Total number of verb errors | 210 | 137 | 204 | 144 |

As the One-Sample Kolmogorov-Smirnov Test indicated that the distribution was not normal, the nonparametric
Mann Whitney Test was used to compare the pre-test means. This test indicated that the difference between the two
groups in the pre-test was not statistically significant and that the groups were comparable before the treatment (z = -
0.663, Asymp. Sig. (2-tailed) = 0.507). This was while the same statistical analysis revealed significant difference
between the post-test scores of the control and experimental subjects (z = - 5.129, Asymp. Sig. (2-tailed) = 0.0).

Next, in order to see which group statistically outperformed the other, the Wilcoxon Signed Ranks Test was used
(since the Kolmogorov–Smirnov test indicated that data was not normally distributed) to compare the differences
between the pretest and post-test scores for each of the three types of L1-induced errors of the groups. The results
(tables 5 and 6) indicated that the difference between the number of errors in the pre and post-tests is statistically
significant for both groups of subject in that they produced fewer errors in the post-test than in the pre-test. In other
words, both the control and the experimental learners produced more grammatically accurate translations after the
instructional treatment.

Table 5. Comparison of the Number of Errors in the Pre- and Post-TT Data of the Control Group (Wilcoxon Test)

| Error | Calculated | Post-test - Pre Test |
|-------|------------|----------------------|
| OPS   | Z          | -2.954               |
|       | Asymp. Sig. (2-tailed) | .003           |
| PPWPA | Z          | -2.530               |
|       | Asymp. Sig. (2-tailed) | .011           |
| PPWLS | Z          | -3.249               |
|       | Asymp. Sig. (2-tailed) | .001           |
Table 6. Comparison of the Number of Errors in the Pre- and Post-TT Data of the Experimental Group (Wilcoxon Test)

| Error   | Calculated | Post-test - Pre Test |
|---------|------------|----------------------|
| OPS     | Z          | -2.933               |
|         | Asymp. Sig. (2-tailed) | .003               |
| PPWPA   | Z          | -4.073               |
|         | Asymp. Sig. (2-tailed) | .000               |
| PPWLS   | Z          | -3.030               |
|         | Asymp. Sig. (2-tailed) | .002               |

The negative Z values in the tables above indicate that there has been a decrease in the number of errors for all three types of L1-induced errors in both groups. The total calculated Z values for the three different error types in the experimental group [(-2.933) + (-4.073) + (-3.030) = -10.036] was higher than that of the control group [(-2.954) + (-2.530) + (-3.249) = -8.733]. This higher Z-value indicates that the experimental group learners outperformed the control group learners as they made fewer number of errors in the post-test translation task i.e. the decrease in the number of errors produced from pre- to post-test is larger than the control.

It is concluded from these statistical analyses that (a) both instructional treatments were effective in reducing the number of errors and in increasing the PLE’s accuracy in using progressive and present perfect forms and (b) that the CFFI treatment was more effective in the correct use of target verb forms by experimental group learners than the traditional non-contrastive FFI treatment (contrary to what was observed in GJT).

4. Discussion

4.1 The Impact of CFFI on the Grammatical Judgment

The effects of the mixed implicit and explicit teaching with and without a contrastive explicit instruction component as manifested in the PLE’s ability to make correct grammatical judgments about problematic progressive and present perfect constructions in English appear to be very small. Statistical quantitative analysis of the GJT scores did not reveal any significant effect of either the traditional explicit FFI or of the contrastive explicit FFI.

A more qualitative analysis of the response patterns on the GJT from learners revealed differential effects of the mixed implicit and explicit teaching with and without contrastive explicit instruction according to the nature of the target feature and the nature of the cognitive procedure that is triggered by the instruction. As for the progressive, it seems that the traditional instructional procedure of the control group, which consisted among other things of memorizing a list of verbs incompatible with the progressive, works better for our PLE. The experimental treatment, providing contrastive metalinguistic instruction and relying on metalinguistic reasoning (deduction and induction), was counterproductive for many learners as 47% of the experimental group performed worse on this aspect of the GJT after the treatment. The abstract metalinguistic reasoning about the semantics of the progressive, the semantic features of different inherent aspect classes (especially states) and the proposed translator technique appears to have confused many of the learners. In contrast, for the present perfect, and particularly the present perfect with locative state verbs, the contrastive FFI treatment seems to have been beneficial, or at least more beneficial than the traditional explicit instructional treatment (43% of the experimental group learners were more accurate in their posttest for these target forms. This ratio was only 19% for the control group learners).

There may be several reasons why the same treatment has a differential impact on the PLE’s grammaticality judgments depending on the target structure. However, it should be borne in mind that all our subjects, as university students of English, had already received several hours of grammar instruction before entering university, including instruction on progressive aspect. This means that none had been completely ignorant about the issue of progressive states before the treatment. The contrastive instruction, with its explicit focus on L1-L2 differences and its use of technical metalinguistic terminology (e.g. stativity, dynamicity), was totally new for all our learners, and as already indicated above, may have confused several of them. Secondly, the differential effect of the treatments may also be due to the nature of the two different target structures itself, including their formal complexity and saliency in the L2. Furthermore, as Doughty and Williams (1998) and Harley (1993) suggest, grammatical errors in communicative
interaction that lead to communicative breakdown will lead more often to negotiation of meaning and hence implicit acquisition than those errors that do not obscure the communication of meaning, and may therefore not require focused instruction and corrective feedback. Since an overextended progressive state is less likely to cause communication breakdown than a present perfect with a locative state, the learners might have underestimated its importance and not paid significant attention to the form.

The last factor to be mentioned here concerns potential individual learner differences between the control and experimental group learners. For instance, it is now reasonably well documented that some learners are more analytically and logically oriented and are therefore more receptive to explicit, analytically and metalinguistically oriented teaching approaches that draw on rules and logical deduction and inference than other less analytically oriented who might prefer for example simple memorization and rote-learning (Dörnyei and Skehan 2003). Since the contrastive instruction of the progressive aspect used in this study relies to a great extent on the logical mind of the learner, it might be interesting to investigate its effect on different learning orientations as well. In contrast, the instructional treatment in the control condition relied less on logical reasoning, i.e. while the experimental learners had to engage in complex rule learning, the control learners had to engage in rote learning (by memorizing a list of verbs that bar the progressive in English). Such individual differences were of course not directly examined in our study, and they need to be further investigated on a larger sample of learners. For these and other reasons, we must be cautious in extrapolating the findings from the GJT to other aspects of the learners’ competence and proficiency in English. It may be that the (absence of) effects of the instructional treatments are not observed in other language tasks. To investigate this possibility, there would be now a turn to the analysis of the PLE’s performance on the translation task.

4.2 The Impact of CFFI on the Correct Use of Verbs in Translation

The analyses of the PLE’s performance on the translation task yielded a number of interesting results. First, it was concluded that the CFFI is effective in reducing the erroneous verb form use of PLE in translating from L2 to L1 (contrary to what it was observed in the GJT). This observation may be due to a variety of factors. The two tasks may each activate different types of knowledge and skills, which in turn may have been differentially affected by the instruction. The GJT may have required the learners to activate a more implicit type of knowledge in contrast to a more explicit type of knowledge activated by the type of translation used in the study. And perhaps the instructional treatments in our study mainly fostered the development of explicit knowledge.

A related explanation is that there may also be an effect of the task itself in the sense that translation pushes learners in their output, thereby fostering the acquisition process, while the GJT does not constitute such a source of comprehensible or pushed output. Besides, a translation is in essence a contrastive activity and as such is more likely to activate learners’ knowledge about L1-L2 contrasts than a non-contrastive task such as the GJT. In other words, the translation task would naturally advantage our experimental learners because they have been previously engaged in contrastive activities as part of their instructional treatment and as a result have acquired the kind of explicit knowledge of L1-L2 contrasts that is required for doing a translation. In short, the experimental learners’ attention to L1-L2 contrasts was heightened and they were therefore probably more aware of the specific cross-linguistic differences implemented in the translation task than the control group learners.

Moreover, it may be suggested that the experimental CFFI was more effective in raising learners’ awareness about potential sources of transfer errors. In other words, the structural and metalinguistic salience of the three problematic target structures induced by the contrastive component in the experimental treatment facilitated the acquisition and mastery of these forms more than in the case of non-contrastive instruction.

5. Conclusions

The quantitative analysis of the GJT data revealed no significant effect of CFFI. The following elements have been put forward to explain this result: the novelty of the translatory technique, or the potential individual differences in the learning orientation of the learners. In contrast, the qualitative analysis indicated differential effects of this type of FFI according to the nature of target form, i.e. CFFI was beneficial in raising the grammatical judgment of PLE regarding present perfect form but not effective in their judgment of ungrammatical progressive forms.

As for the translation task, the CFFI appeared to be effective in the correct use of the target structures by PLE. This may be mainly due to the fact that TT needed explicit knowledge which was presented in CFFI and that translation is a contrastive activity in nature. The present study’s findings may offer implications for pedagogy especially in translation classes. Further investigation is needed for the impact of CFFI on PLE with different learning orientations.
since it is assumed that due to the analytic nature of the CFFI, the analytic learners will benefit more as compared to the holistic learners. Moreover, it would be interesting to see the effect of this type of instruction in the translation from L2 to L1 (English to Persian) as well.

Last but not least, the three target structures chosen for the contrastive instructional treatment in this study, namely OPS, PPWLS and PPWPA were different in nature. In other words, the mechanisms that the learners used to internalize each of these issues differed, but the time devoted to the contrastive instruction of each was the same. The relationship between the time spent on the contrastive instructional treatment, the type of cross-linguistic differences being instructed and the effectiveness of the instruction should be considered in future studies.

References
Afraz, S., & Ghaemi, H. (2012). The effect of focused written corrective feedback of contrastive analysis on efl learners’ acquisition of verb tenses. *Journal of educational and instructional studies in the world, 2*(4), 48-61.

Ammar, A., & Lightbown, P. (2005). More about the acquisition of relative clauses by Arab learners of English. In A. Housen and M. Pierrard (eds.), *Investigations in Instructed Second Language Acquisition*, Berlin: Mouton de Gruyter.

Ammar, A., Lightbown, P., & Spada, N. (2010). Awareness of L1/L2 differences: does it matter?. *Language Awareness, 19*(2), 129-146. https://doi.org/10.1080/09658411003746612

Andersen, R. W., & Y. Shirai. (1996). Primacy of aspect in first and second language acquisition: The pidgin/Creole connection. In W. Ritchie and T. Bhatia (eds.), *Handbook on Language Acquisition*. New York: Academic Press. https://doi.org/10.1016/B978-012589042-7/50018-9

Bialystok, E. (1994). Analysis and control in the development of second language proficiency. *Studies in Second Language Acquisition, 16*, 157-168. https://doi.org/10.1017/S0272263100012857

Comrie, B. (1976). *Aspect*. Cambridge: Cambridge University Press.

De Graaff, R., & Housen, A. (2009). Investigating the Effects and Effectiveness of L2 Instruction. In M. H. Long and C. J. Doughty (eds.), *The Handbook of Language Teaching*, Wiley-Blackwell, Oxford. https://doi.org/10.1002/9781444315783.ch38

Dörnyei, Z., & Skehan, P. (2003). Individual differences in L2 learning. In C. Doughty and M. Long (eds.), *The handbook of second language acquisition*, Malden, MA: Blackwell Publishing, 589-630. https://doi.org/10.1002/9780470756492.ch18

Doughty, C., & J. Williams. (1998). Issues and Terminology. In C. Doughty and J. Williams (eds.), *Focus on Form in Classroom Second Language Acquisitions*. Cambridge: Cambridge University Press, 1-11

Dowty, D. R. (1979). *Word Meaning and Montague Grammar: The semantics of verbs and times in generative semantics and in Montague’s PTQ*. Dordrecht: Reidel. https://doi.org/10.1007/978-94-009-9473-7

Ellis, N. (1994). *Implicit and Explicit Learning of Language*. Academic Press: London.

_____. (2001). *Form-focused instruction and second language learning*. Malden, MA: Blackwell.

_____. (2002a). Does form-focused instruction affect the acquisition of implicit knowledge? A review of the research. *Studies in Second Language Acquisition, 24*, 223-236.

_____. (2002b). The place of grammar instruction in the second/ foreign language curriculum. In E. Hinkel and S. Fotos (eds.), *New perspectives on grammar teaching in second language classrooms*. Mahwah, NJ: Lawrence Erlbaum. 17-34

_____. (2004). The definition and measurement of explicit knowledge. *Language Learning, 54*, 227-275. https://doi.org/10.1111/j.1467-9922.2004.00255.x

_____. (2005). Measuring Implicit and Explicit Knowledge of a Second Language: A Psychometric Study. In *Studies in Second Language Acquisition, 27*, 141-172.

Ellis, R., & Barkhuizen, G. (2005). *Analyzing Learner Language*. Oxford: Oxford University Press.

Han, Z., & Selinker, L. (1999). Error resistance: Towards an empirical pedagogy. *Language Teaching Research, 3*(3), 248-275. https://doi.org/10.1177/136216889900300304

Harley, B. (1993). Instructional Strategies and SLA in Early French Immersion. *Studies in Second Language
Acquisition, 15(2), 245-59. https://doi.org/10.1017/S0272263100011980
Hasannejad, M. R., Araghi, S. M., & Mirzaei, M. (2014). The Efficacy of Delineating L2 Sources of Grammatical Errors with Reference to the Students’ L1 for Increasing Iranian EFL Learner’s Production and Recognition. Accuracy. Journal of Language Teaching and Research, 5(2), 399-405. https://doi.org/10.4304/jltr.5.2.399-405
Horst M., White J., & Bell P. (2010). First and second language knowledge in the language classroom. International Journal of Bilingualism, 14(3), 331-349. https://doi.org/10.1177/1367006910367848
Housen, A., & M. Pierrard. (2005). Investigating Instructed Second Language Acquisitions. In A. Housen and M. Pierrard (eds.), Investigations in Instructed Second Language Acquisition, Berlin: Mouton de Gruyter. 1-27. https://doi.org/10.1515/9783110197372.0.1
Hulstijn, J., & de Graaff, R. (1994). Under what conditions does explicit knowledge of a second language facilitate the acquisition of implicit knowledge?. A research proposal. In Hulstijn, J., and Schmidt. R. (eds.), Consciousness in second Language learning. AILA Review, 11, 97-112
James, C. (2005). Contrastive analysis and the language learner: a new lease of life?. In D.J. Allerton, C, Tshichold, and J. Wieser (eds.), Linguistics, Language Learning and Language Teaching: The International Cooper Series on English Language and Literature (ICSELL), 10, 1-20
Kupferberg, I. (1999). The cognitive turn of contrastive analysis: Empirical evidence. Language Awareness 8, 210-222. https://doi.org/10.1080/09658419908667130
Kupferberg, I., & Olshtain, E. (1996) . Explicit contrastive instruction facilitates the acquisition of L2 forms. Language Awareness, 5, 149-165. https://doi.org/10.1080/09658416.1996.9959904
Lakoff, G. (1965). On the nature of syntactic irregularities. Ph.D. Dissertation, Indiana University, published as Irregularity in Syntax.
Laufer, B. (2005). Instructed second language vocabulary learning: the fault in the default hypothesis. In A. Housen and M. Pierrard (Eds.), Investigations in Instructed Second Language Acquisition, Berlin: Mouton de Gruyter, 286-303. https://doi.org/10.1093/aplin/amm018
Laufer, B., & Girsai, N. (2008). Form-focused Instruction in Second Language Vocabulary Learning: A Case for Contrastive Analysis and Translation. Applied Linguistics, 29(4), 694-716
Manuchehri, P. (1974). Explaining problems of Iranian students by comparing English and Farsi verb forms. TESOL Quarterly, 8(2), 171-176. https://doi.org/10.2307/3585541
Norris, J. M., & L. Ortega. (2000). Effectiveness of L2 instruction: A research synthesis and quantitative meta-analysis. Language Learning, 50(3), 417-528. https://doi.org/10.1111/0023-8333.00136
Ringbom, H. (1987). The Role of the First Language in Foreign Language learning. Philadelphia PA: Multilingual Matters.
Robinson, P. (2001). Individual differences, cognitive abilities, aptitude complexes and learning conditions in second language acquisition. Second Language Research, 17, 368–92. https://doi.org/10.1177/026765880101700405
Schmidt, R. (2001). Attention. In P. Robinson (ed.), Cognition and second language instruction. Cambridge: Cambridge University Press, 3-32. https://doi.org/10.1017/CBO9781139524780.003
Sharwood Smith, M. (1993). Input Enhancement in Instructed SLA: Theoretical Bases. Studies in Second Language Acquisition, 15(2), 165-79. https://doi.org/10.1017/S0272263100011943
Sheen, R. (1996). The advantage of exploiting contrastive analysis in teaching and learning a foreign language. International Review of Applied Linguistics, 24, 183-197. https://doi.org/10.1515/iral.1996.34.3.183
Shirai, Y. (1994). On the overgeneralization of progressive marking on stative verbs: Bioprogram or input?. First Language, 14, 67-82. https://doi.org/10.1177/014272379401404205
Smith, C.S. (1983). A theory of aspctual choice. Language, 59, 479-501. https://doi.org/10.2307/413899
Spada, N. (1997). Form-Focused Instruction and Second Language Acquisition: A Review of Classroom and laboratory Research. Language Teaching, 30, 73-87. https://doi.org/10.1017/S0261444800012799
Spada, N., & Lightbown, P.M. (1999). Instruction, First Language Influence, and Developmental Readiness in Second Language Acquisition. *Modern Language Journal, 83*, 1-22. https://doi.org/10.1111/0026-7902.00002

Spada, N., Lightbown, P. M., & White, J. L. (2005). The importance of form/meaning mappings in explicit form-focused instruction. In A. Housen and M. Pierrard (Eds.), *Current issues in instructed second language learning*. Berlin: Mouton de Gruyter, 199-234.

Vaezi, S., & Mirzaei, M. (2007). The effect of using translation from L1 to L2 as a teaching technique on the improvement of EFL learners’ linguistic accuracy: focus on form. In *Humanising Language Teaching*. Retrieved March 5, 2011 from http://www.hltmag.co.uk/sep07/mart03.htm

Vendler, Z. (1967). Verbs and times. In Z. Vendler (Ed.), *Linguistics in Philosophy*. Ithaca: Cornell University Press. 79-121.