Abstract

The present study sought to investigate the acquisition of referential, quasi and expletive subjects in English at different stages of L2 acquisition. A Grammaticality Judgment Test and a Translation Test were designed and developed to elicit the participants’ knowledge of obligatory subjects in English. The results revealed that the L2 learners conformed to the natives in their performance on obligatory referential subjects and obligatory expletive subjects, but they did not conform to the natives in the case of obligatory quasi subjects. The obtained results can be accounted for by the fact that Persian as the L2 learners’ native language accepts referential and expletive subjects in certain structures, but no quasi subjects exist in Persian. This lends support to Smith and Tsimpli (1995) and Hawkins and Chan (1997) in that adult second language learners are not able to modify those functional features not already encoded in the entries of their native language.

Keywords: expletive subjects, quasi subjects, referential subjects, second language acquisition
1. Introduction

Principle and parameter theory (Chomsky, 1981) has served as a theoretical framework for a number of studies in the field of Second Language Acquisition (for a review, see White, 1989, 2003). Within this model of language acquisition, "Obligatory/null subjects", a property associated with the pro-drop parameter, is one of the most studied topics (Ayoun, 2000; Belletti, Bennati & Sorace, 2007; Boe, 1996; Gurel, 2006; Khalili Sabet, 2006; Liceras, 1989; Platt, 1993; Tsimpli & Roussou, 1991). In Towell and Hawkins' (1994) account of "obligatory subjects", languages which have phonetically specified subjects like English and French (non-pro-drop languages), in contrast to such pro-drop languages as Spanish and Italian, appear to have three types of obligatory pronoun subjects:

1. Referential pronouns, referring to people and things pointed out elsewhere in the discourse (i.e. I, you, he, she, it, they, etc.).
2. Quasi argument pronouns, occurring with such verbs like "snow" and "rain" (e.g. "It's raining.").
3. Expletive pronouns such as "there" and "it", occurring in such constructions as "It is very annoying to talk about the recent riot.", "There are enough books in this library."

To further clarify the distinction between quasi and expletive subjects, Bennis (1986) assumes this distinction to be the necessity of the assignment of a theta-role to the quasi-argument, like any arguments, whereas due to the semantic emptiness, expletives are never assigned a theta-role.

There are two major directions in the acquisition of "obligatory/null subjects", where L1 and L2 bear different parametric values for the pro-drop parameter. The first is the situation where a speaker of an obligatory subject language learns a null subject language as L2 (Belletti et al, 2007; Gurel, 2006; Liceras, 1988, 1989; Phinney, 1987). The second one is where a speaker of a null subject language learns an obligatory subject language as L2 (Boe, 1996; Hilles, 1986; Khalili Sabet, 2006; Platt, 1993; Tsimpli & Roussou, 1991; White, 1985, 1986). With respect to the
obtained findings, what seems to be unanimously agreed upon is that in
the process of L2 development not all types of subject pronouns appear
to be acquired at the same time. Phinney (1987), taking samples from
free compositions in English of two groups of Spanish speakers, found
that while referential pronouns were used in 87% and 94% of the
obligatory contexts, expletive pronouns were used in 44% and 24% of
the obligatory contexts (cited in Hawkins, 2001). These findings are
similar to those of White (1985, 1986) with Spanish speaking L2 learners
of French, and those of Tsimpli and Roussou (1991) with Greek speaking
L2 learners of English. As to the obligatory referential and quasi subjects
in English, Tsimpli and Roussou's (1991) participants (six intermediate
and seven advanced) performed on both judgment and translation tests
perfectly, whereas they allowed null expletive subjects in nearly 80% of
cases where the suppliance of expletive subjects was necessary to
preserve the grammaticality of the constructions.

Two distinct lines of argument have so far interpreted this absence
of simultaneity in the acquisition of different types of subject pronouns.
The first argues for the acquirability of the syntactic properties under
question, even though their parametric values are different in L1 and L2
(Belletti et al., 2007; Liceras, 1989; Platt, 1993; White, 1985). In other
words, it claims that eventually acquisition takes place but at different
stages of language development. This can be accounted for by the idea
that due to their different syntactic and semantic properties, different
levels of difficulty are associated with the acquisition of different types
of subject pronouns. It has been generally found that referential subjects
appear first and expletives appear last, and quasi subjects appear soon
after referential subjects and pose no difficulty for the L2 learners

The second interpretation argues for the inability of L2 learners to
acquire parameters and in turn the associated syntactic properties whose
values differ between L1 and L2 (Hawkins, 2001; Hawkins & Chan,
1997; Smith & Tsimpli, 1995; Tsimpli & Roussou, 1991). More
specifically, Tsimpli and Roussou (1991) claim that beyond a certain age,
L2 learners cannot acquire different subject types in English where their L1 is a null subject language, and the apparent success they have in supplying referential and quasi subjects results from misanalysing English syntactic and morphological properties to make them compatible with their native language properties.

Directly relevant to the pro-drop syntactic features is the issue of the Overt Pronoun Constraint (OPC). OPC refers to the idea that in [+null subject] languages, overt pronoun subjects of embedded clauses cannot receive a bound variable interpretation; hence, they cannot “take quantified expressions or wh-phrases as antecedents, in contrast to null pronoun subjects.” (White, 2003, p. 23). The sentences in (1) illustrate the contrast in question. In the Persian sentence (1a), the overt pronoun “ishan” cannot have the noun “reis” as its antecedent and the sentence is grammatical if “ishan” refers to a person other than “reis”, whereas in (1b) pro has the noun “reis” as its antecedent and the sentence is grammatical.

(1) a. Reis goft [ke ishan be in tahghighat alaghe nadarad].
   “The manager said that he is not interested in this research.”

   b. Reis goft [ke pro be in tahghighat alaghe nadarad].
   * “The manager said that pro is not interested in this research.”

Kanno (1997) and Perez-Leroux and Glass (1999) using English learners of Japanese and English learners of Spanish, respectively, found that the L2 participants tended to adopt the same interpretation as that of their native language rejecting the absence of the obligatory subject pronouns in embedded clauses and interpreting both subjects of the main clauses and some other entities outside the contexts as the possible antecedents of the subject pronouns in the embedded clauses.

This syntactic property of null-subject languages may justify the analysis of the L2 learners’ performances on the null subjects in main and embedded clauses. Another justification for the inclusion of the subject pronouns in main and embedded clauses is that Kanno (1997) and Perez-Leroux and Glass (1999) only investigated the first direction noted
above where a speaker of an obligatory subject language learns a null subject language as L2.

In spite of the existence of an extensive number of informative studies dealing with the acquisition of obligatory subject pronouns and the rather sound positions they have taken, there seems not to be any clear picture of the developmental issues in the acquisition of subject pronouns. Besides, those studies addressing developmental accounts recruited a small number of participants (Hilles, 1986; Tsimpli & Roussou, 1991), included one or two stages in language development (Belletti et al., 2007; Gurel, 2006; Phinney, 1987; Tsimpli & Roussou, 1991), employed a non-standard method in assigning the participants into different stages of L2 acquisition (Tsimpli & Roussou, 1991), included one or two recognized types of subject pronoun, failing to differentiate between quasi argument and expletive subjects (Ayoun, 2000; Belletti et al., 2007; Boe, 1996; Phinney, 1987; Platt, 1993; White, 1986), and used a single elicitation task (Phinney, 1987; Platt, 1993). Furthermore, previous studies are limited to a few languages including English, Spanish, French, Italian and Chinese. In fact, to the best of the researchers' knowledge, there has not been any developmental account of subject pronoun acquisition in case where L1 is Persian (a null subject language) and L2 is English (an obligatory subject language).

To contribute to the related literature, the present study is an attempt to investigate the acquisition of different types of obligatory subjects by adult Persian speaking L2 learners of English at different stages of L2 acquisition, considering that English as a non-pro-drop language appears to have three types of obligatory subjects, namely referential, quasi, and expletive, while Persian as a pro-drop language is expected to lack quasi, and expletive subjects. Persian, however, appears to have expletive subjects in such constructions as (1):

1. "Intor be nazar miresad ke ravesh jadid moasser nabode ast."
   "It seems that the method new effective not has been."

(\textit{It} seems that the new method has not been effective.)
Therefore, the current study investigates a new situation in which L1 has referential and expletive subjects, but lacks quasi subjects, while L2 has all three types of obligatory subjects. More specifically, the following research questions are addressed:

1. To what extent do adult Persian-speaking learners of English at different levels of L2 grammar knowledge acquire "obligatory subject pronouns" in English?
2. To what extent do adult Persian-speaking learners of English at different levels of L2 grammar knowledge acquire "obligatory referential subjects" in English?
3. To what extent do adult Persian speaking learners of English at different levels of L2 grammar knowledge acquire "obligatory quasi subjects" in English?
4. To what extent do adult Persian speaking learners of English at different levels of L2 grammar knowledge acquire "obligatory expletive subjects" in English?

1. Method

1.1 Participants
The population addressed in this study was adult Persian speaking undergraduate and graduate learners of English as L2 in the Iranian academic context. As the current study was conducted within the framework of Universal Grammar and followed its basics and fundamentals, it was assumed in the sampling that adult Persian speaking L2 learners of English studying in Iran were not so much different in terms of the route of SLA development, although they were studying in different cities and universities. Based on this assumption, 152 Persian-speaking undergraduate and graduate learners of L2 English, studying at Sheikhbahaee University and University of Isfahan, were recruited in this study. They were both male and female learners aged between 18 and 27.

Based on the results of the performance of the learners on the Oxford Placement Test (2001), 56 participants were ranked as the elementary
learners (those scoring between 20 and 28), 65 as the intermediate learners (those scoring between 34 and 43) and 31 as the advanced learners (those scoring between 50 and 55). After collecting the data, the researchers found 45 L2 learners not having participated in one or two sessions of data collection and, therefore, decided to exclude them from the study. Besides, based on the participants’ answers to a short questionnaire, which enquired about their backgrounds in English, the researchers decided to exclude 15 participants (out of the remainder 107) having had extensive exposure to English in childhood. In fact, the participants included in this study were only those having been merely involved in learning English in secondary school, for six years, two hours per week.

Thus, the final number of L2 participants was 92 including an elementary group (N= 33), an intermediate group (N= 36), and an advanced group (N= 23). Besides, 6 English native speakers, considered as the control group, participated in this study. The native speakers were both male (N = 2) and female (N = 4), aged between 21 and 50. They had different levels of education raging from Diploma to MA. Their length of residence in an English speaking community ranged between 21 and 41 years since birth. Therefore, the total number of participants was 98.

1.2 Instrumentation

1.2.1 The Oxford placement test (OPT)

The Oxford Placement Test (2001), a 60 item test, served the placement purpose in this research. Results of the OPT provide satisfactory indexes for placement. It is, in fact, a typically practiced test in second language acquisition studies implemented within the framework of Universal Grammar. (e.g., Hattori, 2004; Liszka, 2002).

1.2.2 A grammaticality judgment test (GJT)

To assess the participants' sensitivity to the obligatoriness of the three types of subject pronouns in English and to get insight into the state
of the learners' competence at various stages of L2 acquisition, a 26-item GJT (appendix1) was designed and developed in the present study.

The grammatical and ungrammatical sentences which were included in the test measured the participants' knowledge of a) obligatory referential subjects in main clauses and embedded clauses, b) obligatory quasi subjects, c) obligatory expletive subjects. There were four items for each in the GJT: two grammatical and two ungrammatical. Additionally, three grammatical and three ungrammatical distracters which were irrelevant to the features under investigation were included in the test to hinder the participants' awareness of what was tested.

The participants were supposed to judge on the grammaticality and ungrammaticality of the sentences. There were three options for each test item. They were asked to choose “✓” if they thought that the sentence was grammatically correct, choose “×” if they thought the sentence was grammatically incorrect, and choose “?” if they were not sure of the grammaticality or ungrammaticality of the sentence. They were also asked to correct the sentences they judged as ungrammatical.

Regarding the validity of the test, it was first given to two experts to judge on the content of the test and then to two English native speakers to judge on the grammaticality and ungrammaticality of individual test items based on their native language intuition. As to the reliability of the GJT, Cronbach alpha reliability estimate was 0.73.

1.2.3 A translation test (TT)
To elicit production data with respect to the syntactic properties under investigation, a 17-item TT was designed and developed in this study (Appendix 2). It included Persian grammatical sentences to be translated into English. Simple vocabulary was used in the sentences in order for the test takers not to have any problem with finding the English equivalents. The sentences represented the three types of subjects (three for referential pronouns, three for quasi subjects and five for expletives) which were also assessed in GJT. Six distracters were also added to play
the same role as that of the distracters in GJT. As to the reliability of the TT, Cronbach alpha reliability estimate was 0.81.

1.2.4. Piloting
The three tests (the OPT, GJT, and TT) were piloted on five participants before being administered to the larger groups of participants. The purpose for implementing the pilot study was to assess the time required to administer the tests, the quality of the instructions, and the quality of the individual test items before they were administered to the target groups. The results of the pilot study were used to correct a few problems in vocabulary and spelling in the GJT and TT, and to revise the instructions to make them clear. So, all the required modifications and adjustments were made to the developed tests before they were administered to the target participants of the study.

1.3 Data collection
The Iranian (L2) participants took the tests in three separate sessions. In the first session the OPT was administered and in the second and third sessions, the GJT and TT were administered, respectively, all within the determined time limits obtained from the pilot study (30 to 40 mins for the OPT, 35 to 45 mins for the GJT, and 30 mins for the TT). However, English native speakers attended two sessions, one for the OPT and the other for the GJT. Note that the questionnaire which enquired about the L2 learners’ backgrounds in English was given in the first session prior to giving the OPT.

For each test, clear oral and written instructions were provided for the Iranian (L2) participants both in Persian and in English. An interval of three weeks between each two sessions of data collection was determined in order for the participants not to get bored of taking the tests. The L2 learners took all the tests in groups as they attended their regular and weekly-scheduled classes at their universities.
1.4 Scoring
Each individual test item was scored by two raters. In both GJT and TT, "One" point was considered for each correct answer and "zero" for each wrong answer. The correctness and incorrectness of the answers were determined on the following bases:

- A participant's answer to a particular ungrammatical sentence was correct if he had marked "*" and also had corrected the intended ungrammatical point in the sentence. Otherwise, it was considered as incorrect answer.
- A participant's answer to a particular grammatical sentence was correct if he had marked "√". Otherwise, it was considered as incorrect answer.
- A produced English sentence in TT was correct if the intended syntactic feature had been properly supplied in the sentence. Otherwise, the sentence was incorrect.

2. Results
2.1 The overall performance on obligatory subjects
As to the first research question, the general picture of the participants' performance on obligatory subjects in the GJT and TT is shown in Table 1.

<table>
<thead>
<tr>
<th>Test</th>
<th>elementary</th>
<th>intermediate</th>
<th>advanced</th>
<th>native</th>
</tr>
</thead>
<tbody>
<tr>
<td>GJT</td>
<td>59</td>
<td>76</td>
<td>93</td>
<td>99</td>
</tr>
<tr>
<td>TT</td>
<td>73</td>
<td>91</td>
<td>100</td>
<td>-----</td>
</tr>
</tbody>
</table>

As evidenced in the table above, a rather steady progress can be observed in the participants' performance on both GJT (from 59% to 99%) and TT (from 73% to 100%) obligatory subject items, with a higher performance on the TT than GJT at all levels. A one-way ANOVA conducted on the judgment scores indicated significant differences
among the groups ($F = 42.426, P = .000$). *Post hoc* Scheffe tests showed that the elementary learners were significantly less accurate than all the other groups. The differences between the intermediate group and all the other groups were also significant. The advanced group significantly outperformed the elementary and intermediate ones, but the difference between the advanced and native groups was not statistically significant. Another one-way ANOVA performed on the translation scores showed significant differences among the groups ($F = 28.309, P = .000$). *Post hoc* Scheffe tests showed that the elementary learners were significantly less accurate than all the other groups, but the difference between the intermediate and advanced groups was not statistically significant.

As the GJT scores in Table 1 are the mean scores of the performance on the grammatical as well as ungrammatical items, Table 2 was drawn to indicate the participants' performance on each group of items separately.

<table>
<thead>
<tr>
<th>GJT</th>
<th>elementary</th>
<th>intermediate</th>
<th>advanced</th>
<th>native</th>
</tr>
</thead>
<tbody>
<tr>
<td>grammatical</td>
<td>90</td>
<td>95</td>
<td>99</td>
<td>100</td>
</tr>
<tr>
<td>ungrammatical</td>
<td>29</td>
<td>59</td>
<td>88</td>
<td>96</td>
</tr>
</tbody>
</table>

Based on Table 2, the participants at all levels performed almost well (90% or above) on the grammatical obligatory subjects. However, in spite of a remarkable progress across the levels, the L2 learners seem to have had problem recognizing the ungrammaticality of the structures which lacked the required obligatory subjects. This finding can explain the higher performance on the TT than GJT (Table 1). In fact, the poor performance of the learners on the ungrammatical structures decreased their mean accuracy scores on the GJT. The results of running a one-way ANOVA on the scores on ungrammatical items showed significant differences between the groups ($F = 45.064, p = .000$). *Post hoc* Scheffe
tests indicated that the elementary group was significantly less accurate than all the other groups, and the advanced group was significantly more accurate than the other two groups of L2 learners. However, the difference between the advanced and the native groups was not statistically significant.

Thus, as far as the overall performance is concerned and regarding the first research question, the participants had a significant progress across the levels. Besides, as there was no significant difference between the advanced and native groups in recognizing the grammaticality and ungrammaticality of the structures underinvestigation, and as the advanced participants performed quite well on TT, it was revealed that the participants at advanced stages could conform to the natives in terms of recognizing the obligatoriness of different subject pronouns and producing them in English.

The participants' performance on each type of obligatory subjects is presented in the following sections.

2.2 Obligatory referential subjects

According to the above-mentioned classification of obligatory subject pronouns in non-pro-drop languages (Towell & Hawkins, 1994), referential subject pronouns such as I, you, and they are the first type being obligatory in English both in main and in embedded clauses. To address the second research question, the participants' performance on the GJT and TT items assessing the knowledge about the obligatoriness of referential subjects in main and embedded clauses is reported in Table 3.

Table 3. Mean accuracy scores (%) on obligatory referential subjects in the GJT and TT

<table>
<thead>
<tr>
<th>level</th>
<th>GJT grammatical</th>
<th></th>
<th>GJT ungrammatical</th>
<th></th>
<th>TT main</th>
<th></th>
<th>TT embedded</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>main</td>
<td>embedded</td>
<td>main</td>
<td>embedded</td>
<td>main</td>
<td>embedded</td>
<td>main</td>
<td>embedded</td>
</tr>
<tr>
<td>elementary</td>
<td>60</td>
<td>97</td>
<td>100</td>
<td>39</td>
<td>27</td>
<td>98</td>
<td>68</td>
<td></td>
</tr>
<tr>
<td>intermediate</td>
<td>73</td>
<td>97</td>
<td>100</td>
<td>49</td>
<td>49</td>
<td>100</td>
<td>97</td>
<td></td>
</tr>
<tr>
<td>advanced</td>
<td>94</td>
<td>100</td>
<td>100</td>
<td>87</td>
<td>87</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>native</td>
<td>98</td>
<td>100</td>
<td>100</td>
<td>92</td>
<td>100</td>
<td>-----</td>
<td>----</td>
<td></td>
</tr>
</tbody>
</table>
As shown in the above table, all groups of participants performed well on grammatical items in the GJT (97% and above in both main and embedded clauses), and also the intermediate and advanced groups did well on the TT (97% and above in both main and embedded clauses). But the elementary and intermediate groups recognized the ungrammaticality of the structures lacking obligatory referential subjects in less than 40% and about 50% of the cases, respectively. The elementary participants also supplied referential subjects in embedded clauses in the TT in just 68% of the cases. Regarding the performance on the main and embedded clauses, the elementary participants performed much better on main clauses than embedded clauses in the TT (98% vs. 68%, respectively) and also did better on main clauses than embedded clauses in ungrammatical structures in the GJT (39% vs. 27%, respectively). But the other participants performed almost similarly on main and embedded clauses in both GJT and TT. Therefore, the overall performance on grammatical items was better than the performance on ungrammatical items, and the overall performance on the TT was better than the performance on the GJT.

A one-way ANOVA run on the judgment scores of obligatory referential subjects showed statistically significant differences among the groups (F= 24.368, \( P=.000 \)). Based on \textit{post hoc} Scheffe test results, the differences between the elementary and each of the other groups and the differences between the intermediate and each of the other groups were significant. But the difference between the advanced and native groups was not significant. Two other one-way ANOVA tests were performed on the performance on ungrammatical structures lacking obligatory referential subjects, one for main clauses and the other for embedded ones. The results indicated significant differences among the groups in both cases (main: F= 10.947 \( P=.000 \); embedded: F= 30.011, \( P=.000 \)). \textit{Post hoc} Scheffe tests for the performance on the main clauses showed that the differences between the elementary and intermediate groups, and between the advanced and native groups were not statistically significant, but both the elementary and intermediate groups were significantly less
accurate than the advanced and native groups. Post hoc Scheffe tests for the performance on the embedded clauses indicated that all the differences between each and every two groups of participants were statistically significant. A fourth one-way ANOVA was conducted on the participants' performance on the embedded clauses in the TT. The results showed significant differences between the groups (F= 10.721, P= .000). Post hoc Scheffe tests revealed significant differences between the elementary and intermediate groups, and between the elementary and advanced groups. But the difference between the intermediate and advanced groups was statistically insignificant.

Hence, regarding the second research question, since all L2 learners performed well on the grammatical structures and the mean accuracy scorers of the advanced ones was around 90% on the ungrammatical structures, the overall performance on the GJT referential subjects showed that the L2 learners could conform to the natives in terms of recognizing the grammaticality and ungrammaticality of the structures under investigation. However, the results of the detailed statistical analysis revealed that even advanced learners could not conform to the natives in recognizing the ungrammaticality of the structures lacking obligatory referential subjects in embedded clauses. Regarding the participants' production of the structures under study, there seemed to be no problem at the intermediate and advanced levels and they could produce the required structures correctly.

As to the OPC, the perfect performances of all participants on the grammaticality of the presence of subject pronouns in embedded clauses indicated that the L2 participants had no problems with the presence of a subject pronoun in embedded clauses even if it refers to the same subject as that of the main clause, in spite of the fact that their native language does not allow it. However, the L2 participants’ performances on ungrammatical sentences lacking the obligatory subject pronouns in embedded clauses showed that they had not learned the necessity of the presence of a subject pronoun in an embedded clause even if it refers to the same subject as that of the main clause.
2.3 Obligatory quasi subjects

Addressed in the third research question, and occurring with such verbs as snow and rain, quasi subjects are the second type of obligatory subject pronouns in English. Table 4 shows the participants' performance on the GJT and TT items including quasi subjects in English.

<table>
<thead>
<tr>
<th>level</th>
<th>GJT</th>
<th>grammatical</th>
<th>ungrammatical</th>
<th>TT</th>
</tr>
</thead>
<tbody>
<tr>
<td>elementary</td>
<td>56</td>
<td>85</td>
<td>27</td>
<td>52</td>
</tr>
<tr>
<td>intermediate</td>
<td>77</td>
<td>93</td>
<td>60</td>
<td>78</td>
</tr>
<tr>
<td>advanced</td>
<td>90</td>
<td>98</td>
<td>82</td>
<td>99</td>
</tr>
<tr>
<td>native</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>---</td>
</tr>
</tbody>
</table>

As shown in Table 4 above, the major problem was the participants' inability to recognize the ungrammaticality of the structures lacking obligatory quasi subjects as indicated by their mean accuracy scores (elementary= 27%; intermediate= 60%; advanced=82%). This problem seems to have remained even in advanced stages of L2 acquisition (in 18% of the cases).

A one-way ANOVA conducted on the participants' overall performance on the GJT quasi subject items showed significant differences among the groups (F= 21.656, \( P = .000 \)). Based on the post hoc Scheffe test results, all the differences between the groups were statistically significant. Applying another one-way ANOVA procedure to analyze the performance on grammatical items indicated insignificant differences among the groups (F= 1.974, \( P = .123 \)). Regarding the performance on the ungrammatical structures, the results of performing a third one-way ANOVA demonstrated significant differences among the groups (F= 30.356, \( P = .000 \)). Post hoc Scheffe tests demonstrated that all groups performed differently from each other. To see if differences between the groups' performance on the TT obligatory quasi subject
items were statistically significant, a fourth one-way ANOVA was conducted. The results indicated significant differences among the groups ($F=19.351$, $P= .000$). Also, the results of post hoc Scheffe tests indicated that all the differences between the three groups of L2 learners were statistically significant.

Hence, regarding the third research question, the L2 learners, even at the advanced level, did not learn the obligatoriness of quasi subjects in English. Alternatively, they could not conform to the natives in terms of their performance on the GJT in general and their performance on ungrammatical structures in particular. Regarding the performance on the TT, the advanced group’s mean accuracy score (99%) indicates that they rarely had problem producing structures with obligatory quasi subjects.

### 2.4 Obligatory expletive subjects

Expletive pronouns are the third type of obligatory subjects in English which were dealt with in the last research question. Unlike the first two types, expletive pronouns may never be assigned a theta-role; therefore, they are semantically empty words. The elicited performance on the GJT and TT items assessing the participants’ knowledge of expletive pronouns is presented in Table 5 below.

<table>
<thead>
<tr>
<th></th>
<th>GJT grammaticality</th>
<th>ungrammaticality</th>
<th>TT</th>
<th>level</th>
</tr>
</thead>
<tbody>
<tr>
<td>elementary</td>
<td>56</td>
<td>86</td>
<td>27</td>
<td>84</td>
</tr>
<tr>
<td>intermediate</td>
<td>78</td>
<td>94</td>
<td>61</td>
<td>96</td>
</tr>
<tr>
<td>advanced</td>
<td>96</td>
<td>100</td>
<td>92</td>
<td>100</td>
</tr>
<tr>
<td>native</td>
<td>96</td>
<td>100</td>
<td>95</td>
<td>-----</td>
</tr>
</tbody>
</table>

As indicated in Table 5, the advanced as well as the native participants obtained perfect mean accuracy scores (100%) and the intermediate participants’ mean accuracy score (94%) was only marginally different from perfect, but the elementary participants (86%)
had more problem recognizing the grammaticality of the structures. With respect to the ungrammatical items, however, there seems to have been a serious problem in the identification of the ungrammaticality of the structures lacking obligatory expletives (elementary=27%; intermediate=61; advanced=92%; native=95%).

Regarding the general performance on the GJT obligatory expletive subject items, the results of conducting a one-way ANOVA indicated significant differences among the groups (F= 32.285, P= .000). Post hoc Scheffe tests revealed that all the differences between the groups were statistically significant except for the difference between the advanced and native groups. Another one-way ANOVA test was performed on the scores on the ungrammatical structures lacking obligatory expletives. The results indicated statistically significant differences across the groups (F= 30.384, P=.000). In the case of ungrammatical structures lacking obligatory expletives, post hoc Scheffe tests indicated that the elementary and intermediate groups were significantly less accurate than the other two groups. In addition, the performance of the elementary group was significantly different from that of the intermediate group. But the difference between the advanced and native groups was not statistically significant.

Accordingly, regarding the fourth research question, the advanced learners and not the other two groups of L2 learners could conform to the natives in recognizing the grammatical as well as ungrammatical structures involving expletive subject pronouns. Regarding the performances on the TT, the advanced learners appear to have had no problem in supplying the expletives.

3. Discussion
In this study, we investigated the acquisition of three types of obligatory subjects in English, a non-pro-drop language, by the L2 learners whose first language was Persian, a pro-drop language. Referential, expletive, and quasi subject pronouns are the obligatory subjects in English. Persian appears not to have any of these obligatory subjects, but allows
the presence of referential subjects just for emphasis, and expletive subjects in a limited number of structures, but there is no quasi subject pronoun in Persian (Karimi, 1999). The results indicated that Persian speaking L2 learners of English at advanced stages could conform to the English native speakers just in cases where they had the same syntactic structures in their native language (referential and expletive subjects), and not in the situation where their native language lacks the property under scrutiny (quasi subjects).

Accordingly, as far as the two literature-based lines of arguments are concerned, the aquirability of the syntactic properties under investigation when they belong to different settings of the parameter (Belletti et al., 2007; Platt, 1993; White, 1985) is ruled out by the findings of this study. Furthermore, the hierarchy of difficulty of the appearance of subject types was not confirmed by the obtained results. Nearly all the studies in the literature (Gurel, 2006; Phiney, 1987; Tsimipi & Roussou, 1991; White, 1985, 1986) found referential subjects as the simplest, expletives as the most difficult, and quasi subjects as a simple property appearing soon after referential subjects not posing any difficulty for the L2 learners. However, the current study found quasi arguments as the most difficult subject pronouns even for those L2 learners who were at the advanced stages of L2 development.

Regarding the OPC issue, the obtained findings supported those of Kanno (1997) and Perez-Leroux and Glass (1999) in that L2 learners are predisposed to interpret the antecedents of the subject pronouns in embedded clauses as they are in their L1. This may imply that native speakers of the pro-drop languages tend to accept the absence of obligatory subject pronouns in the embedded clauses in the non-null-subject languages as grammatical, partly because of their tendency to consider the subject of the main clause as the antecedent. In fact, such L2 learners have no problems with the presence of a subject pronoun in an embedded clause even if it refers to the same subject as that of the main clause.
In more detailed analyses, the statistically significant differences between the levels in almost all the analyses performed on the mean accuracy scores revealed the L2 learners' remarkable progress across different levels of L2 grammar knowledge. Also the comparison between the levels with respect to the mean accuracy scores of each type of obligatory subjects evidenced gradual appearance of the three types of obligatory subjects in L2. Alternatively stated, in the process of L2 development not all types of subject pronouns appear to be acquired at the same time. Therefore, the traditional idea of simultaneity and instantaneity in the emergence of different syntactic properties which are associated with a single parameter is rejected (Phinny, 1987; Platt, 1993; White, 1985).

4. Conclusion

Overall, what we found was that the results obtained using a GJT for L1 Persian learners of L2 English as well as a group of native speakers, and a TT for L2 learners are compatible with the idea that beyond a certain age, the acquisition and even modification of those functional features not encoded in L1 do not occur (Hawkins & Chan, 1997; Smith & Tsimpli, 1995; Tsimpli & Roussou, 1991; Tsimpli & Smith, 1991). In fact, the advanced learners in this study conformed to the native group in their judgments on the grammatical and ungrammatical structures eliciting their knowledge of English obligatory referential and expletive subject pronouns which are already present in their own native language. In contrast, as to the obligatory quasi subjects in English which are not present in Persian, they were significantly less accurate than the native group. As far as the overall performances on obligatory subjects are concerned, the acquirability of L2 features where L1 and L2 adopt different parametric values (Lardier, 1998; White, 1985, 1986, 1989, 2003) is supported in this study. However, regarding the L2 learners’ performances on individual obligatory subject pronouns, the findings lend supports to Hawkins and Chan (1997), Hawkins and Hattori (2006), Smith and Tsimpli (1995) and Tsimpli and Rossou (1991) who claim that
the L2 features which are not instantiated in L1 are not acquirable and therefore not attainable at L2 native speakers' level.

Regarding the limitations of the study, the researchers first admit that they have disregarded the expletive and quasi subjects in embedded clauses. No GJT items were designed and developed to assess the participants’ knowledge of obligatory quasi and expletive subjects in embedded clauses. Besides, the size of the sample of English native speakers may limit the strength of the findings of the study. In spite of the great effort made, the number of English native speakers was small.

Finally, future research in this area may begin with further refinements in the research methodology used here, but can extend to the study of other language groups and other grammatical properties. Future research may include discoursal aspects as well as syntactic ones to cast some light on the interfaces between syntax and discourse in the acquisition of English learner grammars, and to provide insights which may lead to further investigations that will advance our understanding of second language acquisition.

References


Referential, Quasi, and Expletive Subjects in L2 English of Persian Speakers

Appendices

Appendix 1

Grammaticality Judgment Test item

Obligatory Referential Subjects

Main clause
1. *Mary is very clever so can learn this lesson easily.
2. *He is very strong even in winter does not wear an overcoat.
3. He couldn't take his wife with him; therefore, he decided not to go to the conference.
4. The young man needs a car for his work, but he is not going to buy any.

Embedded clause
5. *He knows that should work like an amateur.
6. *Our teacher stayed at home yesterday because had a headache.
7. Marry passed the math exam, although she had not studied hard the night before.
8. While I was in South America last year, I learned to speak Spanish.

Obligatory Quasi Subjects

9. *Do we have much time to continue or is too late.
10. *Hurry up is getting late.
11. When I arrived home, it was still raining.
12. Please close the window. It is too cold in here.

Obligatory Expletive Subjects

There
13. *They say that is going to be a party next week.
14. *In winter seems to be less entertainment outdoors.
15. They believed there had been a concert in City Hall.
16. The police report there has been an accident in downtowns.
It
17. *Parents are mostly busy and is difficult for them to find some time for entertainment.
18. *John left the party early seems he didn’t enjoy it.
19. I can't speak English well and it is embarrassing for me to speak English in public.
20. He is very shy and it won't be easy to get him to come with us.

Distracters
21. *Don’t you feel house shaking?
22. *Ali's behavior was not that I had expected.
23. *You have better stay in bed with your cold.
24. Is this the letter which arrived yesterday?
25. The number of students taking part in English classes is increasing.
26. This book is interesting to read.
Appendix 2
Translation Test items

Obligatory Referential Subjects
1. Fahmidam ke bayad bishtar talash konam
2. and 3. Alan yadam nist khoone ra chand forookht

Obligatory Quasi Subjects
4. Madreseha tatil shodand choon barfe ziadi barid.
5. Sale 1940 bood ke Hitler be keshvarhaye oroopae hamle kard.
6. Reza kheili khoshhale choon emrooz tavallodeshe.

Obligatory Expletive Subjects
7. Aya midanid hafteye ayande gharare yek mehmooni bashe?
10. Be nazar mires eke bacheha az tamashaye film lezzat nabordand.
11. Lazeme ke har kas kare khodesha dorost anjam bede.

Distracters
12. Maryam koodom lebas ra entekhab kard?
13. Lotfan az soalate emtehani yek kopi bara man begirid
14. Khanome Sharif Engelisi ra chegoone tadris mikonan?
15. Bala raftan az in kooh mesle abe khordane.
16. Chand nafar gardeshgar az mooze bazdid kardan?
17. Midoone az inja ta Tehran chand kilometer?