How Tense and Aspect Sequenced by Iranian EFL Learners

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Abstract

The objective of the present research is to check how Iranian EFL learners use tense and aspect morphology with different verb classes. The participants of the study were 128 EFL learners from five grades of Iranian junior high school and senior high school. Iranian high school students start learning English from the first grade. A test of 40 items was developed for each grade aimed to tap their knowledge of English tenses presented in their school textbooks. 40 verbs were chosen being from state, activity, achievement, and accomplishment types. The corpus data (5120 tokens) showed, in L2 learners’ test performance, there was indeed a strong correlation between the use of tense-aspect markings and lexical aspect, thus confirming the prediction of the Aspect Hypothesis. But, regarding the sequence of the verb tenses, the findings were not in line with the sequence of the verb tenses emerged in the learners’ performance with the simple present tense, especially at early grades.

Keywords: tense, lexical aspect, telic verbs, grammatical aspect

Introduction

Over the last few decades, there has been a growing interest in development of tense and aspect among L1 and L2 learners in conjunction with lexical classes of verbs. In fact, the objective has been to show that first and second language learners are influenced by the inherent semantic aspect of verbs in the acquisition of tense and aspect markers. Researchers like Bardovi and Harlig, Anderson, Shirai have tried to test the reliability of this idea so far, but it seems that they have been able to come to terms over this issue.

This study aimed to check first whether the verb type influences the aspect types and second whether the sequence of appearance of tense and aspect morphemes in Iranian EFL textbooks match the sequence developed in the junior and senior high school students’ test performance. As a matter of fact, the researcher intended to examine the role of input in the domain of the acquisition of tense and aspect marking in English by Iranian L2 learners and to what extent the results are in line with the Aspect Hypothesis.

Background: Tense and Aspect

Aspect

According to Comrie (1976), aspect indicates the internal temporal constituency of a situation. Here, in this context, aspect refers only to grammatical aspect, and it does not refer to lexical aspect. In fact, grammatical aspect is concerned with those aspectual distinctions that are grammaticalized in languages. So, two sentences could have the same tense but different aspect.

1) He wrote the report.
2) He was writing the report.

These sentences share the same tense, past, but they have different aspects. The situation in the first sentence refers to a single whole situation finished in the past, but in the second situation,
we are concerned with a process with no specific beginning or ending (imperfective). In a sense, aspect is ‘viewpoint’, i.e., in that a situation is viewed by people or it could be said to be subjective because the same situation can be described with different aspects without any contradictions.

Lexical aspect could be as important as grammatical aspect. Lexical aspect, or situation aspect, refers to the inherent features within the lexical items that describe the situation. As Andersen and Shirai (1996) suggested, the natural lexical aspect includes only the morphosyntactic aspectual information in a sentence, such as verbs and their arguments, not temporal adverbials.

For Vendler (1967) verbs in English could be categorized into four classes: states, activities, accomplishments and achievements. He did this classification based on three semantic characteristics: telicity (with or without an endpoint), dynamicity, and durativity (Shirai & Andersen, 1995, p.744).

Table 1: Semantic features of the four verb classes

<table>
<thead>
<tr>
<th></th>
<th>Punctual</th>
<th>Telic</th>
<th>Dynamic</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Activity</td>
<td>-</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Accomplishment</td>
<td>-</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Achievement</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
</tbody>
</table>

States refer to those verbs without dynamics, and continue without applying additional effort or energy, for instance to know, to have, to want, etc. Activities are those verbs which imply durativity and lack a clear endpoint such as to read, to play, to dance, etc. Unlike activities, accomplishments have a clear endpoint like to play half a game, to read a book, to sing a song, etc. Achievements refer to those verbs which happen instantaneously. They are also punctual, telic and dynamic like to recognize, to sell, to call, etc.

The above verbs can switch into other types depending on the complements they take. For instance, the verb to read is naturally an activity verb, but to read a book is an accomplishment, suggesting that the inherent semantic features of a verb are not specifies only by the individual verbs but along with the arguments.

The classification above seems to be “a linguistic universal” and “a cognitive universal” (Andersen & Shirai, 1996, p. 532), having to do with the cognitive features of the actions. That is to say, a verb like to play evokes the same image in the minds of all speakers regardless of their L1s and that image is something which is durative with no clear end point. In sum, lexical aspect in different languages has the same basic meaning (core meaning), but due to the different structural differences between languages, it is represented differently in different languages.

Unlike lexical aspect, grammatical aspect varies from one language to another and it is explicitly reflected on the verbs. In other words, grammatical aspect is easily recognized through the verbs morphology, but the lexical and semantic features of the verb are implied in the verb and can only be learned individually.

Grammatical aspect is explicitly reflected on the verbs, while lexical aspect is an implicit feature within a verb (Erbaugh, 1992). In other words, by looking at the verb you can recognize the grammatical category it belongs to, but the lexical and semantic features of the verb are implied in the verb and can only be learned individually and there are no affixes to indicate it. It is necessary to say that the lexical aspect in different languages has the same basic meaning (core meaning), but due to the different structural differences between languages, it is represented in languages differently. That is to say, we cannot expect one category such as achievements to have the same set of verbs in different languages. Similarly, we cannot translate a verb into another language and expect to have a
match in lexical aspect between the two verbs. Different languages have different rules regarding verb complements. Two verbs in different languages might have the same semantic meaning, but they could refer to different inherent lexical aspeceual classes.

How grammatical aspect and lexical aspect are interrelated in language has been widely investigated by researchers studying first language acquisition as well as second language (L2) acquisition, both in terms of language universals and contrastive analysis. It goes without saying that there is a close relationship between grammatical aspect and lexical aspect (Comrie, 1976; Li & Shirai 2000). This kind of relationship exists between progressive aspect and activities in which a sense of durativity is seen which cannot be expressed through states.

**Aspect Hypothesis and Related Studies**

Researchers studying the acquisition of tense and aspect have noticed that certain verb classes co-occur with specific aspect markers. For instance, they have observed that English learners tend to use simple past in English only with punctual situations (i.e. achievements) and progressive aspect only with activities. This has persuaded researchers to look for the reason. Accordingly, they have come up with several hypotheses to describe what is going on, including Bickerton’s (1984) Punctual-Non-Punctual Distinction (PNPD) and State-Process distinction, which basically assume that children mark those distinctions instead of tense. Bloom et al. (1980 cited in Andersen & Shirai, 1996) also maintain learning tense is followed by learning aspect in the sense that lexical aspect emerges first in children syntax then tense appears. Unlike Bloom et al., Weist et al. (1984) opposes this idea and claims that what Bloom puts forward is the Defective Tense Hypothesis. Based on studies on the acquisition of Polish, Weist et al. believe that children mark both tense and aspect. At present, the most influential hypothesis in acquisition of tense and aspect is the Aspect Hypothesis (Andersen, 1991, 1993; Andersen & Shirai 1994, 1996). The Aspect Hypothesis(Andersen & Shirai, 1994, p. 133) claims that “first and second language learners will initially be influenced by the inherent semantic aspect of verbs or predicates in the acquisition of tense and aspect markers associated with or affixed to these verbs.”

More particularly, the Aspect Hypothesis states that learners tend to attach perfective past inflections predominantly to achievements and accomplishments in the early stages. And later they attach imperfective past marking to state and activities. What Andersen and Shirai (1996) have proposed is just an observational description of inherent lexical aspect and grammatical tense aspect marking pairings. As a matter of fact, they have tried to come up with a cognitive explanation of the processes involved in learning these grammatical elements. Andersen and Shirai (1996, p. 533) summarize the descriptive claims of the Aspect Hypothesis as follows:

1. Children first use past marking (e.g. English) or perfective marking on achievements and accomplishments, eventually extending its use to activities and states.

2. In languages in which the perfective-imperfective distinction exists, imperfective past appears later than perfective past, and imperfective past marking begins with states and activities, then extending to accomplishments and achievements.

3. In languages with progressive aspect, progressive marking starts with activities, and later extends to accomplishments or achievements.

4. Progressive marking is not incorrectly overextended to states.

The Aspect Hypothesis does not have to do with the question of whether tense or aspect is acquired earlier. Instead, it seeks to unravel the relationship between inherent lexical aspect and tense-aspect morphology. As a matter of fact, it does not try to find a causal model of what makes the learners create a certain interlanguage, it just describes the patterns found in the interlanguage. Tense-aspect morphology is considered to be the final product of the learners, not the starting point.
The Aspect Hypothesis also has come up with a developmental model based on which the distribution of tense-aspect morphology across verb classes may appear within eight developmental stages (Andersen, 1991, p. 315): at Stage 1, learners do not mark past tense or aspect; at Stage 2, the learner starts using the perfective aspect (or simple past tense) in punctual verbs only; at Stage 3, the learners encode imperfective forms with states; at Stage 4, the learners start using perfective for accomplishments, while the imperfective spreads to activities: they know that all verbs should be marked by inherent aspect in past tense; at Stage 5, they begin to use verbal morphology to overlap within each verb type: imperfective or perfective aspect can be used for telic verbs; at Stage 6, the use of activities with perfective or imperfective aspect spread at this stage; at Stage 7, they know that punctual events can be encoded by imperfective or perfective aspect; Stage 8 the final stage of this sequence in which they learn how to encode states in perfective aspect.

The Aspect Hypothesis represents a whole new orientation in research about tense-aspect morphology. Many researchers in L2 acquisition have tried to test this hypothesis on different languages and given it ample support. These studies started with a small number of target languages, namely Spanish, English and French (Salaberry, 1998, 1999; Kumpf, 1984; Robison, 1990; Bardovi-Harlig, 1992, 1998; Kaplan, 1987; Bardovi-Harlig & Bergström, 1996 among others), but later on expanded to languages such as Catalan, Dutch, Italian, Japanese, Portuguese and Russian (Comajoan, 1998 and Housen, 1994; Giacalone Ramat, 1995, 1997). The subjects involved in the studies include tutored and untutored learners, foreign language learners and second language learners. The methods used to elicit data from the subjects range from personal and impersonal narratives, to written narratives, to silent film retells, to cloze passages.

The claims put forward by the hypothesis seem to be supported with L2 acquisition studies. The relationship between perfective past (e.g. English simple past, Spanish preterite) and achievements and accomplishments has been shown to be a strong attested stage in the distribution of verbal morphology in the interlanguage system. These studies have also described the developmental sequences pointed at by Andersen in cross-sectional studies. In languages in which there is contrast between perfective/imperfective such as French, Italian and Spanish, learners tend to acquire imperfective later than perfective and learning states seems to be strongly associated with imperfective (Harly, 1992; Bardovi-Harlig & Bergström, 1996; Salaberry, 1999; Kihlstedt, 2002; Howard, 2004 among others). The frequency of imperfective learning with verb classes is not as extensive as the frequency of perfective/past. Even when language learners reach the final stage in learning imperfective, achievements, the rates of appropriate use (accuracy) are higher with the prototypical uses (atelic verbs) than with the non-prototypical uses (telic verbs).

Occurrence of states is mainly seen with verbs be and have or their equivalents in the learners’ interlanguage. This is not witnessed in the acquisition of perfective past morphology. You can see that the learners tend to overgeneralize progressive to states, but the frequency is not high even for learners who have received limited instruction (generally around 3-4% for personal narratives, and 7-9% for cloze passages) (Bardovi-Harlig, 2000).

Methodology

Hypotheses

The goal of this study is first to investigate the claims made by the Aspect Hypothesis and second to see how English tenses are sequenced by the Iranian EFL learners and how similar the sequence is with the sequence provided by the school system books. Previous researches provided ample evidence in favor of the Aspect Hypothesis and mixed support for transfer.
The current study provides numerical data by performing a quantitative analysis based on the test performance of the subjects. This enables a precise account of how learners come to develop tense and aspect morphology over time.

To investigate learners’ representation of aspect and tense, the following hypotheses were put forward:

1) The progressive morpheme -ing co-occurs with activity verbs.
2) Telic verbs co-occur with achievement verbs.
3) The Iranian high school learners follow the same sequence prescribed by the syllabus designers for the English verb tenses.

**Participants**

The participants of the study were 128 EFL learners from five grades of Iranian junior high school and senior high school. Iranian high school students start learning English from the first grade. The only tense they learn at this grade is simple present copula, so the study considered the subjects’ performance form the second grade. The subjects were from Persian L1 background and were all male students ranging from 12 to 16 years old. They were from five intact classes (Table 2) who had not studied English outside the educational system (the subjects with extra instruction outside school were excluded from the study).

**Table 2: Number of subjects in each grade**

<table>
<thead>
<tr>
<th>grade</th>
<th>Second JHS</th>
<th>Third JHS</th>
<th>First SHS</th>
<th>Second SHS</th>
<th>Third SHS</th>
</tr>
</thead>
<tbody>
<tr>
<td>number</td>
<td>25</td>
<td>27</td>
<td>23</td>
<td>25</td>
<td>28</td>
</tr>
</tbody>
</table>

**Instrumentation**

A test of 40 items was developed for each grade aimed to tap their knowledge of English tenses presented in their school textbooks (Table 3). 40 verbs were chosen being from state, activity, achievement, and accomplishment types (Table 4).

**Table 3: Tenses covered by the high school textbooks**

<table>
<thead>
<tr>
<th>Grades</th>
<th>Tenses</th>
<th>Second JHS</th>
<th>Third JHS</th>
<th>First SHS</th>
<th>Second SHS</th>
<th>Third SHS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present progressive</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Present simple</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Present perfect</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Simple past</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Past progressive</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Past perfect</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
</tbody>
</table>

**Table 4: Verbs investigated in the study**

| state          | know, want, have, like, need, love, enjoy, see, hear, believe |
| activity       | stand, run, sleep, wear, play, dance, read, walk, sing, learn |
| achievement    | find, start, begin, happen, say, die, become, kill, sell, tell |
| accomplishment | run a mile, sleep for an hour, wear s.th to the party, dance for an hour, play half a game, read a book, build a house, write a letter, make a cake, sing a song |

The test items were from two types: gap-filling task and grammaticality judgment task. In the former, the subjects were required to provide the correct form of the verbs in the parentheses and in the latter they were required to choose the grammatical choice from among the four choices available. The present study aimed to check the subjects' performance on a number of English tenses: present simple, present continuous, present perfect, simple past, past continuous, and past.
perfect. The G-f tests were constructed to create an obligatory context for a target tense form to recognize the correct sentences.

The researcher had the tests reviewed by the teachers to make sure of their content validity and to make sure the verb types used in the study are all familiar for all the subjects. Then, they were piloted for reliability and the results showed that they enjoyed an acceptable level.

Procedure

As the main purpose of the study was to find out how the verb tenses co-occur with verb types and whether the high school students at different grades develop English tenses according to the sequence provided by their textbooks or they develop their own sequence, a cross sectional study was conducted. The tests were administered to the subjects in the end of school year to find out whether they had mastered the target tenses in each specific grade. 5120 tokens were obtained from the tests. MSExcel was used to perform an analysis of the distribution of tense and aspect markings.

Finding the percentage of each tense for each grade, the emerging pattern of tenses during these school years and how these tenses would co-occur with semantic types of verbs would be revealed.

Results and Discussion

The one hundred twenty eight subjects produced 5120 tokens containing verbal inflections of English tenses to find out the frequency distribution of inflections across some English tenses (Table 5, 6, 7, 8, and 9). These tokens belonged to five grades of second junior high school (Table 5), third junior high school (Table 6), first grade of senior high school (Table 7), second grade of senior high school (Table 8), and third grade of senior high school (Table 9). In SJHS, only two tenses are taught, so the test items were devoted only to present simple and progressive.

Table 5: The distribution of each lexical class of verbs for the Second JHS

<table>
<thead>
<tr>
<th>State</th>
<th>activity</th>
<th>tokens</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present continuous</td>
<td>28%</td>
<td>72%</td>
</tr>
<tr>
<td>Simple present</td>
<td>55%</td>
<td>45%</td>
</tr>
</tbody>
</table>

To answer the first research question,” The progressive morpheme co-occurs with activities”, the token frequency distribution of inflections across lexical aspectual classes was examined known as across-category analysis which shows how morphological forms correlate with semantic types of verbs. As Table 5 shows, more than half of the activity verbs were used in present progressive tense (72%) and the rest belonged to the simple present tense marking (28%). In addition, we can find that 55% of stative verbs co-occur with simple present.

Table 6: The distribution of each lexical class of verbs for the Third JHS

<table>
<thead>
<tr>
<th>State</th>
<th>activity</th>
<th>accomplishment</th>
<th>achievement</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Progressive</td>
<td>3%</td>
<td>81%</td>
<td>7%</td>
<td>9%</td>
</tr>
<tr>
<td>Past</td>
<td>3%</td>
<td>4%</td>
<td>17%</td>
<td>76%</td>
</tr>
</tbody>
</table>

According to Table 6, 81% of the activity verbs were used for present and past continuous and 76% of the achievement verbs correlated with past tense. Again, there is a high correlation between activity verbs and progressive tenses and between past tense and achievement.

Table 7: The distribution of each lexical class of verbs for the First SHS

<table>
<thead>
<tr>
<th>State</th>
<th>activity</th>
<th>accomplishment</th>
<th>achievement</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Progressive</td>
<td>2%</td>
<td>85%</td>
<td>5%</td>
<td>8%</td>
</tr>
<tr>
<td>Past</td>
<td>8%</td>
<td>4%</td>
<td>18%</td>
<td>71%</td>
</tr>
</tbody>
</table>
Table 7 suggests almost the same results as Table 6, that is, present and past progressive tenses are highly correlated (85%) with activity verbs indicating that the subjects have reached an appropriate knowledge to differentiate these verbs from the other ones and their semantic features. Also, achievement verbs are highly correlated with past tense.

Table 8: The distribution of each lexical class of verbs for the Second SHS

<table>
<thead>
<tr>
<th>State</th>
<th>activity</th>
<th>accomplishment</th>
<th>achievement</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Progressive</td>
<td>2%</td>
<td>90%</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>Past</td>
<td>7%</td>
<td>3%</td>
<td>25%</td>
<td>65%</td>
</tr>
</tbody>
</table>

Table 9: The distribution of each lexical class of verbs for the Third SHS

<table>
<thead>
<tr>
<th>State</th>
<th>activity</th>
<th>accomplishment</th>
<th>achievement</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Progressive</td>
<td>1%</td>
<td>89%</td>
<td>3%</td>
<td>7%</td>
</tr>
<tr>
<td>Past</td>
<td>4%</td>
<td>2%</td>
<td>23%</td>
<td>71%</td>
</tr>
</tbody>
</table>

Table 8 and 9 again show that activity verbs occur mostly with progressive and achievement verbs with past tense for the second and third grades of senior high school.

Investigation of the temporal markings used in the learners’ test performance suggested that the use of temporal markings was indeed influenced by the semantic features of the verbs in English which, in one sense, means the confirmation of the first and second hypothesis and finally of the Aspect Hypothesis. But it is worth saying that Persian and English share many things concerning tense and aspect. So the results should be interpreted cautiously. That is to say, like English statives do not co-occur with activity verbs in Persian or achievement verbs are mostly co-occur with past tense, suggesting that learners can easily transfer from their L1 systems into their L2 systems.

But regarding the third hypothesis, “Do the Iranian high school learners follow the same sequence prescribed by the syllabus designers for the English verb tenses?” the token frequency distributions for all the verbs in five grades were found.

Figure 1: Frequency distribution of verb tenses for SecJHS

Note. PreP= Present progressive; SPre= Simple present

Fig 1 shows that present progressive verb (78%) is seen more frequently than simple present verb (55%), suggesting that the subjects have had less difficulty with present progressive than simple present.

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At this grade, as you see two tenses (past progressive and simple past) have been added to the syllabus. Simple past has the highest frequency (89%) among the tenses although new to the subjects. In the study, regularity or irregularity of simple past was not considered. That is to say, understanding the concept of past tense was more important than recognizing the correct form, so even if the subjects recognized the form ‘found’ as ‘finded’, it was acceptable. The second highest frequency belongs to present progressive (83%) and past progressive ranks the third (79%). The interesting thing is that simple present has the lowest frequency (68%) among the verb tenses although the subjects have more familiarity with this verb than, for instance, past progressive and simple past. The reason might be due to the time points these tenses refer. That is, comparing simple present with the other three tenses, you will see that simple present has the least time reference vividness among the other tenses, so it might be cognitively more cumbersome for learners to learn it.
Note. PrePer=Present perfect

Comparing Fig 2 and 3, you can see almost the same token distribution for present progressive (88%), simple past (93%) and past progressive (87%), but the considerable discrepancy is seen for the present simple (87%), which is 20% more than the previous grade. So, this might imply that learning simple present learning takes more time than other tenses probably due to lacking a reference point within a situation. A situation whose temporal boundaries are blurred compared to present progressive or simple past which are bound by specific time references. Besides, the subjects have the transfer strategy at their availability as the subjects have exactly these tenses in their mother tongue.

![Figure 4: Frequency distribution of verb tenses for Second SHS]( Diagram1)

Note. Paper =past perfect

The only noticeable difference between Fig 3 and 4 is the growth of token distribution for the present perfect which is about 20% more than the previous grade.

![Figure 5: Frequency distribution of verb tenses for Third SHS]( Diagram2)
The token distributions for all the tenses have remained constant, suggesting that the subjects have stabilized their knowledge regarding the verb tenses.

**Conclusion**

The results of the study are in line with the findings of the Aspect Hypothesis, and thereby confirm the first and the second hypotheses suggesting that the progressive morpheme -ing co-occurs with activity verbs and telic verbs co-occur with achievement verbs, but the trouble is that the results could not be absolutely interpreted to be so since the subjects’ performance is influenced by many factors. One of the factors is learners’ first language which happens to be difficult to control. This might make the results seem tricky because one cannot make sure whether the subjects’ performance is influenced by the lexical features of the target language verbs or the similarities between the lexical features of the languages under the investigation. But, we should bear in mind that there exists “a linguistic universal” or “a cognitive universal” to borrow a term from Andersen & Shirai which helps language speakers to share lexical features with each other.

The results also showed that the sequence of emergence of the verb tenses in the learners’ performance was somehow similar to the sequence appeared in their books, but regarding the simple present tense it seems that the syllabus has not been able to provide enough opportunities for the learners to learn this tense as well as other tenses at the early grades.

**References**


