Acquisition of grammatical aspect by Iranian EFL learners

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Abstract

This study investigated the acquisition of grammatical aspect by Iranian EFL learners. The main question addressed in this study was whether Iranian EFL learners could distinguish conditions under which they must use either the perfective aspect or imperfective aspect. A group of 110 adult, Persian-Speaking learners of English both at BA and MA levels Took a Michigan test based on which they were assigned to two levels of proficiency namely, low and high were selected. A test of Grammatical Aspect was then administered to detect the factors which affect their choice of perfective and imperfective aspects. The results showed that**.**

Keywords: Tense, Lexical aspect, Grammatical aspect, Perfective aspect, imperfective aspect

I. Introduction

Tense and aspect have long been the focus of language pedagogy. In the study of the acquisition of temporal systems, three concepts are necessary: tense, grammatical aspect and lexical aspect. Tense refers to a situation on a time line. Grammatical aspect states the internal temporal constituency of a situation. Finally, lexical aspect refers to the characteristics inherent in the lexical items that define the situation (Fan, 2005).

Aspect gives importance to other temporal information like duration, completion or frequency and states the temporal flow of time. Different from tense which shows the relationship of a situation at different time periods, aspect shows a single situation as being ongoing or completed. Generally, there are two types of aspect: grammatical aspect and lexical aspect. Aspect should be distinguished from tense which is primarily concerned with location in time rather than its duration. Tense refers to *temporally when* while aspect refers to *temporally how* (Olbishevska, 2004). Grammatical aspect is expressed through grammatical markers, linguistic devices such as auxiliary and verb inflection. It is a grammatical category that shows temporal flow in a given action or states the point of view of the speaker.

English has two aspects that combine freely with tense and mood: the perfective (e.g. I have/had read the book), and progressive (*I am/was reading the book*). According to Durich (2005) , the perfective aspect states a position outside of the situation so the writer or speaker views an eventuality as an entity. Conversely, the imperfective aspect views eventualities from inside and emphasizes the internal temporal structure of the situation. The imperfective

is a grammatical aspect which demonstrates a situation considered as internal structure, such as ongoing, whether that situation happens in the past, present, or future. The perfective aspect is a grammatical aspect which demonstrates a simple whole situation, whether that situation occurs in the past, present, or future.

Anderson, Matlock and Spivey (2008) explain that aspect has obtained appreciable attention over the past 40 years. Aspect shows aspectual classes of verbs and the mixture of the verb with its arguments and adverbial phrases or to morphological aspectual markers, such as inflectional or derivational morphemes marked on the verb. Aspect shows two related processes: the ability of verbs and other lexical items to delineate how a condition progresses or holds in time (Lexical Aspect) and verbal auxiliaries and affixes show the result of a situation at a given time (Grammatical Aspect). In sum, aspect emphasizes situation, action, state and event.

Another parameter used for identifying grammatical aspect is morphological inflection. Comrie (1976) postulates that the perfective aspect considers a situation beyond the writer/ speaker's views as an eventuality. Conversely, the imperfective aspect emphasizes eventualities from inside and considers internal temporal structure of the situation, since it can both look backwards towards the start of the condition, and forwards towards the end of the situation, considering that the situation is persistent and continues, without any beginning and end. The imperfective aspect concentrates on a certain point of time inside a situation, not regarding the beginning or the end of a situation. Comrie argues that the meaning of the perfective aspect does not show that conditions are not durative, but that it just views a situation from the outside. Regarding the lack of reference to the internal temporal structure of a situation of the perfective aspect, the imperfective aspect refers to the internal temporal structuring of a situation. However, the differences between perfective and imperfective aspect should not disguise the identical specifications between the two, as they both happen within the same verb phrase (VP) and not reject each other. Additionally the semantic features of imperfective and perfective aspect complete each other.

Olbishevska (2004) believes that the main aspectual topic in Grammatical Aspect is that of perfectivity and imperfectivity. The semantic part of the perfective is shown as a function that shows contingency to a 'total event'. Hence, the perfective shows events that constitute wholes. Stoicescu (2009) states that grammatical aspect or viewpoint aspect constitutes the differentiations between the perfective and imperfective viewpoints. Regarding perfective viewpoint, the speaker assumes the event externally and views it as finished or completed. Perfective aspect morphology shows completion with an endpoint (telic event) or termination for event without natural endpoint (atelic event). An imperfective viewpoint shows the incompleteness of the condition and its ongoing nature.

Durich (2005) demonstrates that the semantic features of the perfective aspect is shown by short duration, but imperfective aspect is shown in a longer period of a situation due to its atelic specification and limited duration and the perfective is telic, inchoative and resultative, since the perfective often refers to either the beginning or the end of a situation.

According to Jabbari (1998) Grammatical Aspect is the way speakers look at part of a situation (i.e. incompleteness or imperfective). Different forms of grammatical aspects cannot change inherent lexical aspect:

1) A. John paints a picture. (grammatical aspect = perfective, inherent aspect = accomplishment)
2) B. John is painting a picture. (grammatical aspect = imperfective = inherent aspect accomplishment)
3) C. John has painted a picture (grammatical aspect = perfective, inherent aspect = accomplishment
4) D. John has been painting a picture (grammatical aspect = perfective = inherent aspect = accomplishment
5) E. John has painted a picture (grammatical aspect = perfective inherent aspect = accomplishment
6) F. John has been painting a picture. John has been painting a picture(grammatical aspect = imperfective, inherent aspect = accomplishment)
7) G. John will paint a picture (grammatical aspect = perfective, inherent aspect = accomplishment)
8) H. John will be painting a picture. John has been painting a picture (grammatical aspect = imperfective, inherent aspect = accomplishment)
9) I. John will have paint a picture (grammatical aspect = perfective, inherent aspect = accomplishment)
10) J. John will have been painting a picture. John has been painting a picture (grammatical aspect = imperfective, inherent aspect = accomplishment)

Verbs can be divided into four aspectual categories using three universal aspectual values:[punctual][telic] and [dynamic]. Achievements are [+punctual] and [+telic], accomplishments are [-punctual] and [+telic], activities are [-telic] and [+dynamic] and statives are [-dynamic].

According to Fedder (2012), there are three types of cues to grammatical aspect. The first cue is a temporal-linguistic which specifies if an event has an endpoint. Atelic predicates prefer imperfective aspect, while telic predicates prefer perfective aspect. The second set of cues are knowledge-based semantic cues, which focuses on subject animacy, presence/absence of a patient and presence/absence of locative information. Here we assumed that the sentences with animate subjects, no patients, and locative information would prefer imperfective aspect, while sentences with inanimate subjects, patients, and no locative information would prefer perfective aspect. The third type of cue is discourse cue, which shows a narrative introduction to each sentence, and the order in which locative information is presented. In light of the foregoing discussion, the present study aimed to answer the following research questions:

1) Do temporal-linguistic and semantic factors affect Iranian EFL leaners understanding of perfective and imperfective aspect?

2) Does proficiency level affect Iranian EFL learners to understand different types of grammatical aspect?

IV. Materials and Methods

Participants

A group of 110 male and female participants were randomly selected from among the adult students of English at Islamic Azad University of Takestan, Shahreghods and Tehran Research and Science Center both at BA and MA levels with ages between 20 and 30.

Materials

Two tests were used. One of the tests was devised based on English Michigan ECCE practice test for checking students' proficiency level. They had 40 multiple choice grammar items, 40 multiple choice vocabulary items, and 20 multiple choice reading comprehension items. The total score was 100 based on which the participants were ranked. Then a test was administered extracted from Fedder (2012) to check potential factors which may affect students' understanding of perfective and imperfective aspects. There were 8 factors: 4 factors related to perfective aspect and other 4 other factors related to imperfective aspect.

Procedure

We first aimed to see if proficiency level affects Iranian EFL learners' ability in distinguishing different types of grammatical aspect. To select homogenous participants and put them into two low and high proficiency levels, the Michigan Proficiency Test was administered. Fifty six students whose scores were equal or lower than the mean were considered as low proficiency students, and 54 students who scored higher than the mean were regarded as high group. Our main test was given to determine factors which influence the use of perfective and imperfective aspects.

V. Results and Discussion

The first research question addressed if temporal-linguistic and knowledge based semantic factors affect Iranian EFL learners' understanding of perfective and imperfective aspects. Following Fedder (2012), first the descriptive statistics for perfective aspect related to four temporal-linguistic and knowledge based semantic factors were assessed. Table 1 represents the related descriptive statistics.

Table 1

Descriptive Statistics for Temporal-linguistic and knowledge based semantic Factors related to Perfective Aspect

Factors	Mean	Std. Deviation	N
1. Telic Transitive Animate	2.59	1.383	110

2. Telic Transitive Inanimate	2.87	1.434	110
3. Telic Intransitive Inanimate	2.38	1.585	110
4. Atelic Transitive Inanimate	2.15	1.551	110

Figure 1 below displays the graphical representation of the results.

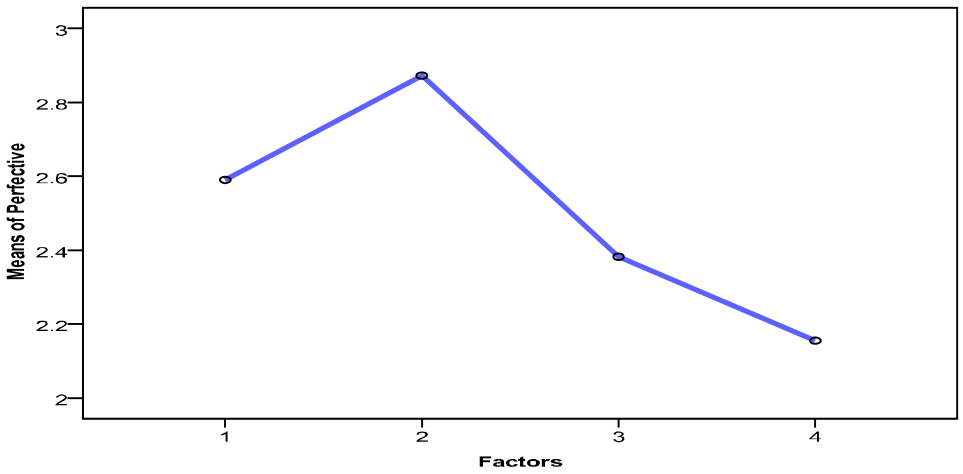

Figure 1. *Perfective Results of Four Temporal linguistic and knowledge based semantic Factors*

Repeated Measures ANOVA was carried out to compare the mean score of 110 participants on four temporal-linguistic factors to see whether there is a significant difference between them.

The results of ANOVA are presented in Table 2 below.

Table 2

Multivariate Tests of Repeated Measures ANOVA for the Effects of Temporal-linguistic and knowledge based semantic Factors related to Perfective Aspect

Effect	F	Hypothesis df	Error df	Sig.	Effect size
Temporal Factors	12.091	3.000	107.000	.000	.253

ANOVA found statistically significant effects for temporal-linguistic and knowledge based semantic factors, which is the within-subject factor ($F_{(3, 107)} = 12.09$; $p = .000$, $p < .05$). However, the interaction between within-subject and between-subject factors, i.e. temporal

and knowledge based factors and proficiency level was not significant (F = 1.74; p = .16, p> .05). Besides, the interaction effect between factors and level of proficiency was not significant ($F_{(3, 106)}$ = 1.74; p = .16, p> .05).

Because we have gained a statistically significant result from the preceding analysis, this implies that there is a difference somewhere among our factors. As a result, Post-hoc Pair wise Comparisons were applied for perfective aspect. Table 3 presents the results.

Table 3

Post-hoc Pair wise Comparisons between each two Temporal-linguistic and knowledge based semantic Factors in Perfective Aspect

(I) Factor	(J) Factor	Mean Difference (I-J)	Std. Error	Sig.
1. Telic Transitive Animate	2	-.282	.121	.127
	3	.209	.143	.884
	4	.436*	.141	.015
2. Telic Transitive Inanimate	3	.491*	.134	.002
3. Telic Intransitive Inanimate	4	.227	.147	.751
4. Atelic Transitive Inanimate	2	-.718*	.123	.000

Post-hoc Pair wise comparisons showed that there was a statistically significant difference between factor1 and 4 (p = .01, p< .05) and between factor 2 and 4 (.000, p < .05). In conclusion, factor 2 (Telic Transitive Inanimate) has the highest mean (M = 2.87, SD = 1.43). Then the descriptive statistics for temporal-linguistic and knowledge based semantic factors related to imperfective aspect were assessed. Table 4 represents the related descriptive statistics.

Table 4

Descriptive Statistics for Temporal-linguistic and knowledge based semantic Factors related to Imperfective Aspect

Temporal Factors	Mean	Std. Deviation	N
1. Telic Intransitive Animate	1.77	1.450	110
2. Atelic Transitive Animate	2.20	1.393	110
3. Atelic Intransitive Animate	2.71	1.546	110
4. Atelic Intransitive Inanimate	2.34	1.467	110

Figure 2 below displays the graphical representation of the results.

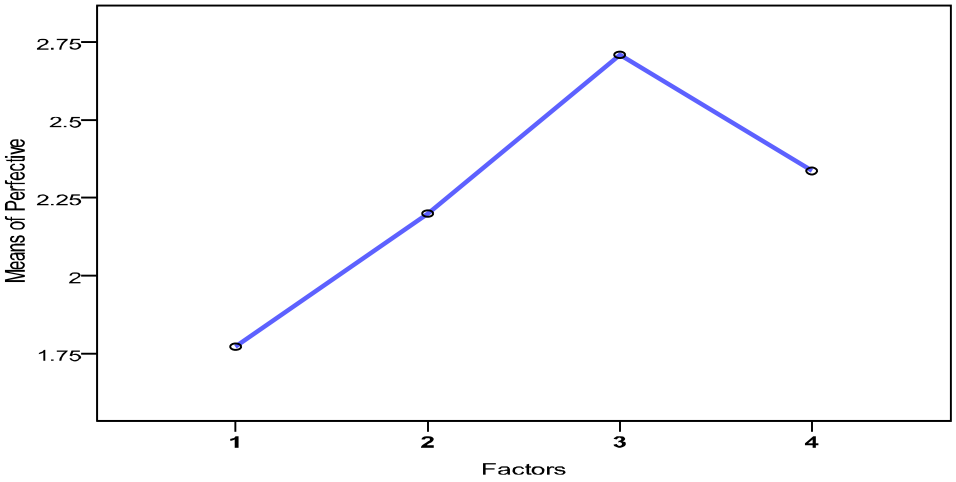

Figure 2 *Imperfective Results on Four Temporal-linguistic and knowledge based semantic Factors*

Repeated Measures ANOVA was used to compare the mean temporal factors in imperfective aspect. The results of ANOVA are presented in Table 5 below.

Table 5

Test of Within-Subject Effects for the Effects of Temporal-linguistic and knowledge based semantic Factors on Imperfective Aspects

Source		Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Temporal-linguitic Factors	Greenhouse-Geisser	49.327	2.393	20.61	12.132	.000	.100

ANOVA results revealed significant effect for temporal-linguistic and knowledge based semantic factors based on Greenhouse-Geisser (F= 12.32; p = .000). Therefore the first null hypothesis was rejected. In addition, the interaction effect between factors and level of proficiency was significant ($F_{(3, 106)}$ = 6.27; p = .001, p< .05).

ANOVA shows the difference somewhere among our factors. It does not tell you which factors differ from each other. Consequently, Post-hoc Pair wise comparisons was used. Table 6 represents the relate results.

Table 6

Post-hoc Pair wise Comparisons between each two Temporal-linguistic and knowledge based semantic Factors on Imperfective Aspect

(I) Factor	(J) Factor	Mean Difference (I-J)	Std. Error	Sig.
1. Telic Intransitive Animate	2	-.427	.175	.099
	3	-.936*	.187	.000
	4	-.564*	.184	.016
2.Atelic Transitive Animate	3	-.509*	.122	.000
3. Atelic Intransitive Animate	4	.373*	.124	.019
4.Atelic Intransitive Inanimate	2	.136	.135	1.000

Post-hoc showed that there was statistically significant difference between all possible pair of factors except for the difference between factor1 and 2 (p = .09, p> .05) and between factor 2 and 4 (p = 1.00, p> .05). To sum, factor 3 (Atelic Intransitive Animate) has the highest mean (M = 2.71, SD = 1.54). The second research question was raised to see whether students' proficiency level has any effect on their understanding perfective aspect and imperfective one.

To put the participants into two low and high proficiency levels, the Michigan Proficiency Test was administered. Table 7 represents the descriptive statistics for results of this homogeneity test.

Table 7

Descriptive Statistics for Michigan Test

N	Range	Min	Max	Mean	Median	Mode	SD	Variance
110	22	57	79	68.16	68.00	67	6.420	41.221

The mean score of Michigan test was 68.16, median was 68, and the mode was 67, which are to a large extent the same. However, mode is a little smaller. From the participants, those (N = 56) students whose scores were equal or lower than the mean were considered as low proficiency students, and those (N =54) who scored higher than the mean were regarded as high group. The participants' raw scores on Michigan proficiency test are represented in Table 8. In order to test this null hypothesis, the between-subject ANOVA was utilized first for perfective and then imperfective aspects. Table 9 presents the descriptive statistics for perfective.

Table 9

Descriptive Statistics for Temporal-linguistic and knowledge based Factors on Perfective Aspect

Temporal factors	Proficiency Level	Mean	SD	N
1. Telic Transitive Animate	Low	1.77	1.293	56
	High	3.44	.861	54
	Total	2.59	1.383	110

	Low	1.84	1.345	56
2. Telic Transitive Inanimate	High	3.94	.231	54
	Total	2.87	1.434	110
	Low	1.29	1.217	56
3. Telic Intransitive Inanimate	High	3.52	1.023	54
	Total	2.38	1.585	110
	Low	1.23	1.221	56
4. Atelic Transitive Inanimate	High	3.11	1.254	54
	Total	2.15	1.551	110

Figure 3.below provides a graphical representation of the results for perfective.

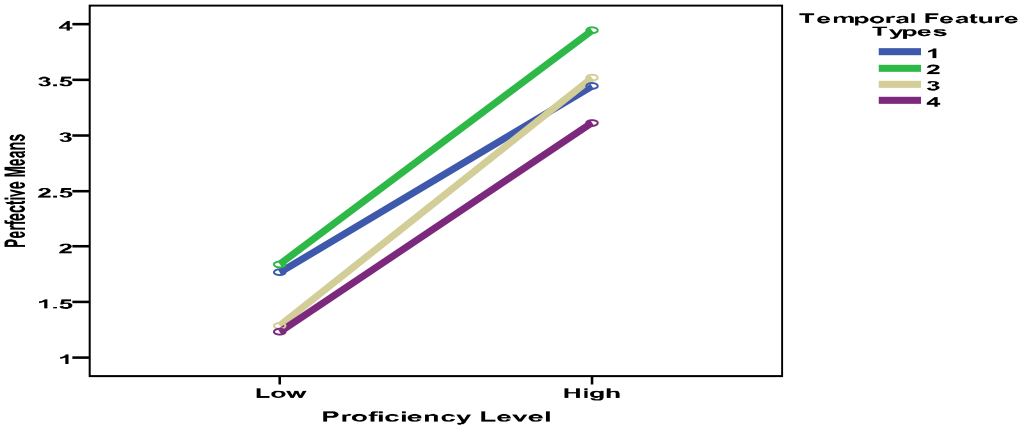

Figure 3. *Perfective Results for Temporal-linguistic and knowledge based semantic factors in Two Proficiency Levels*

Table 10 below shows the results of Between-subject ANOVA for the perfective aspect.

Table 10

Tests of Between-Subjects Effect of ANOVA for the Effect Proficiency Level on Perfective Aspect

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Intercept	2788.687	1	2788.687	1422.150	.000	.929
Level	428.223	1	428.223	218.382	.000	.669
Error	211.777	108	1.961			

ANOVA detected a statistically significant effect for level of proficiency as the between-subject variable on perfective aspect ($F = 218.38$; $p = .000$, $p < .05$). Then another between-

subject ANOVA was used for testing the effect of level of proficiency on imperfective aspect. Table 11 shows the related descriptive statistics for imperfective.

Table 11

Descriptive Statistics for Temporal-linguistic and knowledge based semantic Factors on Imperfective Aspect

Temporal factors	Proficiency Level	Mean	SD	N
1. Telic Intransitive Animate	Low	1.41	1.108	56
	High	2.15	1.664	54
	Total	1.77	1.450	110
2. Atelic Transitive Animate	Low	1.32	1.162	56
	High	3.11	.965	54
	Total	2.20	1.393	110
3. Atelic Intransitive Animate	Low	1.61	1.448	56
	High	3.85	.359	54
	Total	2.71	1.546	110
4. Atelic Intransitive Inanimate	Low	1.37	1.259	56
	High	3.33	.890	54
	Total	2.34	1.467	110

Figure 4 below is a graphical demonstration of the descriptive statistics for imperfective.

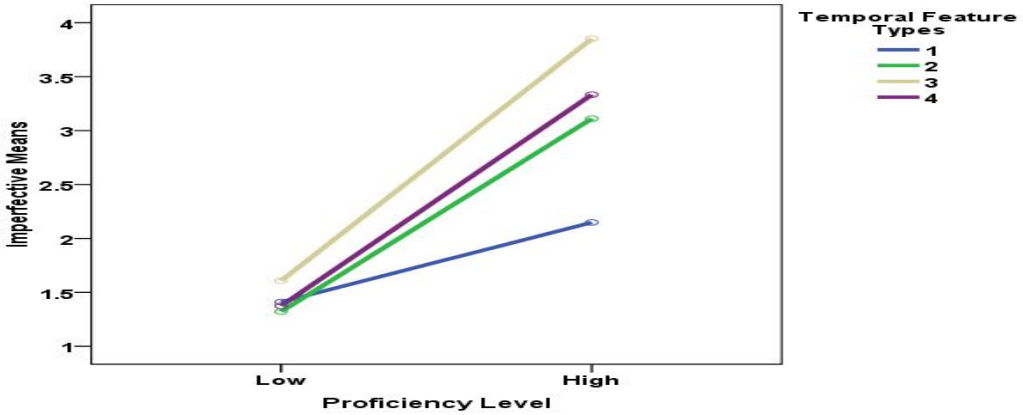

Figure 4. Imperfective Results on Temporal-linguistic and knowledge based semantic Factors and Proficiency levels

Table 12 below manifests the *ANOVA* results for imperfective.

Table 12

Tests of Between-Subjects Effect of ANOVA for the Effect Proficiency Level on Imperfective Aspect

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Intercept	2266.210	1	2266.210	1347.075	.000	.926
Level	311.300	1	311.300	185.042	.000	.631
Error	181.690	108	1.682			

ANOVA results showed a statistically significant effect for the level of proficiency (F = 185.04; p = .000, p< .05) on imperfective and as mentioned in Table 6 (F = 218.38; p = .000, p< .05) on imperfective aspect.

Discussion

The main concern of the study was to see whether temporal linguistic and knowledge based semantic factors affect Iranian EFL learners understanding of perfective and imperfective aspects. The results show that the factor 2 (Telic Transitive Inanimate) was the only factor in perfective aspect that was considerably more effective than three other factors. In fact, the results showed that Telic, Transitive, and Inanimate features are the main clues used for determining the temporal grammatical perfective aspect.

Moreover, the results showed that in imperfective aspect, Factor 3 (Atelic Intransitive Animate) was the only factor in imperfective aspect that was considerably more effective than three other factors. In fact, the mean value for Factor 4 (Atelic Intransitive Inanimate) was 2.34 with standard deviation 1.367. The mean for factor 2 (Atelic Transitive Animate) is 2.20 with standard deviation 1.393. Also the mean for factor 1 (Telic Intransitive Animate) was 1.77 with the standard deviation of 1.450. Thus, it can be inferred that Factor 3 with Atelic, Intransitive, and Animate temporal features are the best combination for understanding grammatical imperfective aspect. So, it was found that Atelic, Intransitive, and Animate features are the main clues used for understanding the temporal-linguistic and knowledge based semantic grammatical imperfective aspect.

The second purpose of the present study was to examine the effect of language proficiency level on the Iranian EFL learner′s ability to understand different types of grammatical aspect. The results obtained from the participants showed that proficiency level had a significant impact on the learner′s ability to understand different types of grammatical aspect. So it can be said that the students with high proficiency level distinguish better that the students with low proficiency level both in perfective and imperfective aspects.

VI. Conclusion

The results of this study suggested that temporal-linguistic and knowledge based semantic factors affected the learners understanding of perfective and imperfective aspects. They also showed that proficiency level affect learners to understand different types of grammatical aspects. This is in line with the findings of Fedder (2012) who claims that three factors are effective in grammatical aspects understanding: 1.Temporal-Linguistic Cues to Grammatical

Aspect, 2. Knowledge-Based Semantic Cues to Aspect, 3. Discourse Cues to Grammatical Aspect. The results showed that Telic, Transitive, and Inanimate features are the best combination for determining the temporal grammatical perfective aspect. As for imperfective aspect, Atelic, Intransitive, and Animate temporal features are the best combination for understanding grammatical imperfective aspect.

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