The Acquisition of English *be* Auxiliary and Thematic Verb Constructions by Adult Arab ESL Learners

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Abstract

This study investigates the acquisition of English *be* auxiliary and thematic verb constructions in non-past contexts by adult Arab learners of English as a Second Language (ESL). It is well known that second language (L2) learners show variability in the L2 production of verbal inflectional morphology by either omitting inflections or marking inappropriate substitution of one kind of inflection for another. The Missing Surface Inflection Hypothesis (MSIH) (Prévost and White, 2000) proposes that L2 learners have knowledge of functional categories and features underlying tense and agreement although sometimes they fail to produce the corresponding overt forms. In order to examine the nature of the adult Arab ESL learners' interlanguage (IL) grammar at the L2 ultimate attainment level as well as the extent to which the learners can acquire English *be* auxiliary and thematic verb constructions in non-past contexts, an oral production task (ORPT) was conducted with 77 adult Arab ESL learners subdivided into three proficiency levels (lower-intermediate, upper-intermediate and advanced). An analysis of the ORPT show that the L2 learners omit and wrongly use the *be* auxiliary verbal inflection (*am*, *is*, *are*) more frequently than the thematic verb inflection (*-s*) in their production. The results reveal that the adult Arab ESL learners, even at ultimate attainment level, are more sensitive to the thematic verb contractions than to the *be* auxiliary constructions. These results suggest that variability in the production of verbal inflectional morphology is due to problems with the realization of surface morphology in accordance with the MSIH.

Keywords: Second language acquisition, Missing Surface Inflection Hypothesis, Arab ESL learners

1. Introduction

English is taught as a second language (L2) for almost eight years at the school and the university levels in Yemen. However, anecdotal observations show that adult native (Yemeni) Arabic-speaking learners of English as a Second Language (ESL) have protracted difficulty acquiring and producing correct grammatical forms in speaking and writing, particularly the English verbal inflectional morphemes including the functional categories (FCs) of T(ense) and Agr(eement) and all related morphosyntactic features.

Functional categories are grammatical categories which play a formal role in a sentence and the learning of these is essential to the acquisition of L2.The acquisition of FCs has been a major topic of debate in first language (L1) and L2 acquisition research within the framework of generative grammar (White, 2003). Over the years, generative research has examined the central question of whether L2 acquisition is similar to L1 acquisition by determining the availability of Universal Grammar (UG) to the L2 learner.UG is postulated as a theory of an innate language faculty which consists of invariant principles for all languages and a finite number of parameters that account for language variation (see e.g. Chomsky, 1995). Accordingly, language acquisition is assumed to involve setting a small number of parameters and the issue in L2 acquisition is whether UG accessibility is possible for adult L2 learners in the same way as it is for L1 learners.

Various assumptions as to the L2 learners' access to UG as well as the function of L1 in the process of L2 acquisition have also been the focal points of investigation. The main aim of this study is to: (a) determine the theoretical view that is able to explain the fact concerning why adult Arab ESL learners exhibit variability in their use of English verbal inflectional morphology (i.e. why they produce tense and agreement morphemes variably),

most of which are widely confirmed by the L2 literature, (b) address the issue of how syntactic structures and verbal inflectional morphology interact and whether defective morphology necessarily reflects the lack of syntactic representations and (c) visualize the nature of the adult Arab ESL learners' interlanguage (IL) grammar at the L2 ultimate attainment level.

To achieve these goals and to further contribute to the L2 acquisition literature, the present study tests the Missing Surface Inflection Hypothesis (MSIH) (Prévost and White, 2000) by looking at the acquisition of the English FCs of non-past tense and agreement within the generative framework and examines the influence of UG in the IL of the learners. In particular, the main focus is on the acquisition of the verbal FCs of T and Agr, and the formal features of [+finite, -past] with *be* auxiliary and thematic verbs. The associated morphemes being examined are the third person singular agreement morpheme –*s* and the *be* auxiliary forms, *is*, *am* and *are*.

As the learning of grammar is crucial to the acquisition of L2 and due to the increasing demands for the use of the English language in education, communication and various other fields, it is important that the adult Arab ESL learners be competent in the language. The findings of the study could shed more light on adult learners' L2 acquisition process and contribute to the gap in the body of the L2 acquisition literature, particularly in the Yemeni Arabic context.

2. Theoretical Framework

The study of L2 acquisition within the generative framework has concentrated on the grammatical properties of the L2 learners' IL grammars. The relevance and applicability of UG to (adult) L2 acquisition has been demonstrated in a large body of studies (for overview, see. e.g., Hawkins, 2001; White, 2003). L2 acquisition researchers have been concerned with the basic question of whether adult L2 learners have access to the same innate principles of UG as L1 acquirers, or whether IL systems fall within the range of natural language grammars constrained by UG. In recent years, the question of whether UG is available in L2 acquisition has been approached from the perspective of the acquisition of FCs and the formal features associated with them. Functional categories have played an important role in UG-based language acquisition studies since the 1990s (Mitchell and Myles, 2004: 54). In fact, much recent work in UG-based studies of L2 has focused on ascertaining whether or not FCs and features are available to L2 learners. Findings from the various studies have shown that learners either have no access, partial access or full access to the innate principles of UG

The full access approach theorists (e.g. Epstein et al., 1996; Schwartz and Sprouse, 1994, 1996, 2000; White, 2003; Chu and Schwartz, 2005 among others) argue that FCs, functional features, and feature specifications associated with FCs are acquirable in adult L2 acquisition, i.e. L1 and L2 acquisition are basically similar processes and there is no critical period for instantiation of principle and parameters settings of L2. In other words, the principles of UG are available to L2 learners throughout the initial state, intermediate state and steady state in which the initial state of the L2 learners is the structure of the L1 where new FCs and features are attainable and in principle, it is possible for the learners to reset parameters and reach native-like competence in the L2. One of the full access hypotheses with respect to the characterization of L2 acquisition in non-native IL namely, the Missing Surface Inflection Hypothesis (MSIH) (Prévost and White, 2000), is put to test in this study. The MSIH argues that the acquisition of formal abstract syntactic features and their morphophonological forms is in IL grammars. The following section discusses the MSIH in more detail.

2.1 The Missing Surface Inflection Hypothesis (MSIH)

The MSIH claims that adults have full access to UG, and they are not limited to only those features and parameter settings of the L1. Advocates of the MSIH (e.g. Haznedar and Schwartz, 1997; Prévost and White, 2000; White, 2003; White et al., 2004; Herschensohn, 2001; Ionin and Wexler, 2002; Haznedar, 2003; Prévost, 2003) assume that L2 learners have unconscious knowledge of the functional projections and feature values underlying T and Agr. Nevertheless, these L2 learners frequently show variability with respect to the production of verbal inflectional morphology by either omitting inflections or marking inappropriate substitution of one kind of inflection for another (White, 2010: 9). The underlying syntactic representations are thus correct; however, the resulting surface functional morphology is not target-like due to problems in mapping the correct morphology onto the feature representation in syntax.

The frequently observed variability in the production of certain inflectional morphemes has motivated Prévost and White (2000) to argue that this could be a reflection of a production-specific mapping problem rather than a deficit in the syntactic representation competence, possibly due to prosodic constraints operative in the L2 learners' L1 (Goad and White, 2006). The representations of the inflectional morphology may be fully specified in the L2 grammar, yet the production of the corresponding overt forms seems to be problematic for the L2 learners due to performance limitations resulting from communication pressure (Prévost and White, 2000: 129). In other words, failure to produce consistent inflection is attributed to difficulties in accessing the relevant lexical items by which inflection is realized, particularly when speaking (White, 2010: 9).

Haznedar and Schwartz (1997) examine data collected from an L1 Turkish child learning English as L2. Besides accurate agreement, they find evidence of use of both finite and non-finite forms but little evidence associated with the Optional Infinitive (OI) phenomenon espoused by Wexler (1994). As there is no evidence for a syntactic deficit, such as underspecification of T (as posited by Wexler in the OI stage) in child L2, they conclude that the child's non-finite morphology indicates missing or absence of inflection at the surface morphological level rather than at the featural level and speculate as to whether the OI stage is present in L2 acquisition.

Despite the variant positions, there is a general agreement that finite and non-finite forms produced by child L1 learners at the OI stage are structurally distinct and characterized by the use of null subjects. When L1 children use non-finite verbs in place of finite ones, they are indeed non-finite forms (Prévost and White, 2000: 106).In fact, it has been argued that L1 learners know the "specifications of finiteness morphemes" as they are able to differentiate between finite and non-finite verbs structurally and syntactically, and when they use finite verbs, the inflection is nearly always accurate (Ionin and Wexler, 2002: 97). For instance, an L1 learner may produce clauses such as *Mary likes chocolate* and *Mary liked chocolate* but not *I likes chocolate*. Such variation in the use of finiteness, according to Prévost and White is, therefore, not random.

In line with Haznedar and Schwartz (1997), Prévost and White (2000), proponents of the MSIH, investigate the production data from adult L2 learners (two Moroccan-Arabic learners of French and two native speakers of Spanish and Portuguese learners of German). They have found out that there is morphological variability. The L2 learners rarely place finite verbs in non-finite position but frequently place non-finite verbs in finite position. Nonetheless, the distribution of finite and non-finite forms is not random, with finite forms raised above negation, for instance, as required in French and German, whereas non-finite forms appeared both in raised and in low positions in the sentence (Renaud, 2008: 197). Thus, although it is often omitted, when inflection is used, it is mainly target-like when it is supplied (Herschensohn, 2001). In fact, there is evidence that when L2 learners use overt T and Agr morphology, their accuracy rate could be up to about 95% (Prevost and White, 2000). That is, the L2 learners have abstract features for non-finiteness and Agr in their IL representation but are not accessing the appropriate surface forms, thus, using a certain form as a default.

Similarly, Lardiere (1998a,b) in examining the L2 English of an adult Chinese speaker Patty, has observed an asymmetry between the acquired syntax and the production of inflectional morphology. Although Patty showed knowledge of syntactic representation with respect to English verbs, such as nominative case assignment and lack of thematic verb-raising, she had a very low production of past tense and third person singular morphology on thematic verbs, suggesting that Patty's IL English representation does include the FCs of T and Agr and that the lack of overt inflectional morphology does not signify an absence of FCs or features in L2 grammar (p.19).

The same observation is found in Lardiere's (2000) study where Patty produced many *be* forms which are raised to T and appropriately inflected but hardly produced any affixal *-s* inflection. The finding indicates that Patty has mastered the suppletive agreement morpheme as she has an "agreement feature-checking mechanism, implicating the presence in the syntactic representation of the associated functional category" (p.394).

Such omission of agreement morphemes could be due to phonological constrains of a learner's L1 (Lardiere, 2007). Patty's L1, Chinese, disallows word-final consonant clusters (e.g. wal(ks) which are frequently found in inflected main verbs in English. The result could be further compounded by the fact that native speakers of English tend to preserve the final *–t/d* in past tense markings (e.g. passed) rather than in bare forms (e.g. *past*) and a prolonged exposure to English may have resulted in a high degree of *–t/d* deletion (Lardiere, 2007). These factors seemed to have affected Patty's use of the simple past morphology and forced her to produce bare forms instead of the required inflected forms.

Thus, omission of Agr in the IL grammars of L2 learners is not due to syntactic impairment but to an inability to map surface inflection with abstract features (Lardiere,1998a,b, 2000, 2007). Lardiere's main point throughout is to emphasize that the absence of the verbal inflectional morphology does not directly indicate a deficit/impairment in the learner's IL syntactic representation and that, therefore, syntactic knowledge and its morphophonological reflexes need to be comprehended independently. Therefore, L2 learners have no difficulty in acquiring L2 functional categories or features but they have difficulty mapping and matching their knowledge to L2 language-specific rules particularly those that govern affixal inflection. As a result, the L2 learners opt for default uninflected forms where inflected forms are required.

Prévost and White (2000) explain this mapping problem by taking the Distributed Morphology (DM) stance (Halle and Marantz, 1993). In DM, each inflected form is assumed to be associated with grammatical features such as tense, number and person. For insertion of form into a terminal node in the syntax to take place, the features of the form must be consistent with the features of the terminal node. However, it is possible to insert a lexical item into a hosting node even if its features do not exactly match the features of the hosting node, as long as they form a proper subset of the features on the hosting node. Thus L2 learners "have acquired the relevant features of the terminal nodes in the syntax (from the L1, from UG or motivated by L2 input)" but they fail to acquire the feature

specifications of the associated lexical items (Prévost and White, 2000: 127). Thus, non-finite forms in L2 grammar are underspecified with respect to finiteness and therefore can be inserted into a node involving the feature [+finite] whereas finite forms in L2 grammar are specified as [+finite] and hence cannot be inserted into a non-finite node. As such, non-finite forms being underspecified, function as defaults in L2 acquisition, appearing either in [-finite] or in [+finite] position.

Prévost and White's view (2000) under the MSIH therefore predicts that there is no syntactic deficit in L2 grammar as the T node is fully specified such that non-finite forms inserted into [+finite] node exhibit the syntactic behaviour of a finite verb for cases of null subject and placement with respect to negation (p.128). In other words, when L2 production exhibits missing or incorrect functional morphology (e.g. past tense, determiners, grammatical gender, etc.), and correct verb or adjective placement, use of plurals, or selection of nominal pronouns, the MSIH is supported. These co-occurring characteristics are important because they should be affected by the same functional features. If features are missing or incorrect, then learners should not be able to accurately produce these other structures.

The MSIH also predicts no correction between null subjects and OIs (Rule and Marsden, 2006: 194). Consequently, non-finite forms would continue to be used by L2 learners even after the acquisition of the more fully specified finite forms. Empirically, studies on intermediate to advanced L2 learners report that feature clashes do not surface; rather, when an incorrect inflectional form is supplied, the least specified or a less specified form is used instead of the more specified target form in verbal inflection contexts (cited in Hopp, 2010). Nevertheless, access to finite forms is sometimes blocked, a phenomenon that is claimed to be due to processing or communication pressure (Prévost and White, 2000: 129).

On the other hand, Ionin and Wexler (2002), in examining the L2 spontaneous English of 20 L1 Russian children have found that the L2 learners produce high rates of non-finite verbs but never "use agreement morphemes for inappropriate tense, person or number" (p.115). In addition, the Russian L2 learners of English omitted the third person singular -s at 78% and the past tense -ed at 58% in context, while omitting be copula at 16% and be auxiliary at 33% in context (p. 106). In other words, the L2 learners have acquired the be verb forms before the third person singular -s and the past tense -ed as they had more difficulties with the affixal inflection due to lack of thematic verb-raising in English. In addition, these L2 learners also exhibit the phenomenon of be overgeneration, where be was inserted in non-be contexts, for example, *and then the police is come there*, thus functioning as an all-purpose early finiteness marker (p. 110). These findings suggest that "fully specified FCs coupled with difficulties in acquiring certain morpheme types (i.e. affixal agreement morphemes)" are indeed in line with the MSIH which proposes that "UG principles are fully available in early stage of L2 acquisition while parameter-setting takes time" (p.128-130). That is to say, child L2 learners are like L1 learners in that they have full access to UG rules but need more time for parameter-resetting before they fully acquire the language specific rules.

In a study, Haznedar (2003) investigates both child and adult L2 acquisition. She analyzes both child L2 data (Turkish-speaking child learner of L2 English), and adult L2 data (English-speaking adult learner of L2 Turkish). The data examined are obtained form a child's longitudinal data consisting of 46 recordings, covering a period of 18 months as well as an adult L2 learner's spontaneous production data including 6 recordings, covering a period of 5 months. The findings from both studies (child L2 acquisition of English and adult L2 acquisition of Turkish) are in line with the MSIH which suggests that the L2 learners face difficulties with the overt realization of surface morphology and that the lack of functional elements does not necessarily indicate the absence of the associated FCs.

Further evidence in favor of the MSIH is also presented in Geckin and Haznedar's (2008) study which looks at longitudinal data from three Turkish-speaking child L2 learners of English with special reference to inflected and uninflected verbs. The study examines the distribution of copula be, subject-verb agreement (3sg-s), irregular and regular tense marking, overt subjects, and nominative subject pronouns in obligatory contexts. Results show that despite high rates of uninflected verb forms, the children almost never use agreement morphemes for inappropriate tense, person or number. The learners also show higher proficiency in the use of be forms than in the use of main verb inflection. The same findings are supported by Haznedar's (2001) case study where the L1 Turkish child learner of L2 English uses copula be forms accurately (over 90% of the time) after four months of exposure, while affixal inflectional tense morphemes are produced less than 75% correctly in context after 17 months of exposure. The lack of functional elements here does not represent syntactic impairment in the early L2 grammar of children (p. 258). Rather, the absence of verbal morphology merely indicates the absence of surface realization of inflectional morphology.

To sum up, the full access view advocates that FCs are indeed present in L2 learners' grammars despite parametric differences between their L1 and L2 and lack of overt inflection is attributable to a 'mapping' problem of surface inflection rather than failure of or no access to FCs (e.g. Prevost and White, 2000, Ionin and Wexler, 2002, White,

2003, 2010, Lardiere, 1998a, b, 2000, 2007, Haznedar, 2003). The MSIH is proposed to explain, first of all, the fact that L2 morphosyntax is learnable and, second, that missing surface inflections in L2 acquisition do not necessarily imply an underlying syntactic deficit, rather the problems of adult L2 learners are related to the mapping of specific morphological forms to abstract categories (Prévost and White 2000: 130). In other words, failure to produce inflected verbs is not indicative of a defective grammatical representation, rather, a tense feature is represented in the syntax but the L2 learners fail to consistently link this feature to its particular form which is realized in English, for instance. Instead, the lexicon supplies something else, often an uninflected default form (White, 2010: 9). The prediction about IL representation and approximation to the target L2 grammar posited by the MSIH is that the IL syntactic properties in post–critical period L2 acquisition can be native-like, however, the lack of (or the variable use of) morphological forms in the IL representations reflects a problem with the realization of surface morphology, rather than an impairment in the functional domain.

3. Linguistic Assumptions

English and Arabic differ in their unmarked word order. While English is SVO (1), Arabic is mainly VSO (2 a). Yet, adopting the proposals by Koopman and Sportiche (1991) concerning the fact that the subject is generated in the Spec(ifier) of Verb Phrase (VP), it is argued that the two languages have the same basic order, i.e. SVO as in (1) and (2 b) respectively.

(1)	[The student]	[understood]	[the lesson]	(English)
	S	V	O	SVO
(2) a.	[Fahima] understood	[?a-TTalibu] the- student	[?a-ddarsa] the-lesson	(Arabic) VSO
	V	S	O	
b.	[?a-TTalibu] the- student	[Fahima] understood	[?a-ddarsa] the-lesson	(Arabic) SVO
	S	V	O	

'The student understood the lesson.'

In other words, Arabic has a richer inflectional morphology (Bolotin, 1995) than English (Chomsky, 1995) and this enables morphological discrimination of surface grammatical relations in a way that is usually impossible in English. The richer inflectional morphology of Arabic often permits retrieval of the surface grammatical relations directly from the morphological inflections, whereas English relies heavily on word order for encoding of surface grammatical relations. As a result, Arabic word order is freer than English with Arabic in general allowing any permutation of the major constituents without loss of grammaticality or change in the basic cognitive meaning of the sentence.

Infl is the place holder for both T and Agr morphology. However, there are crucial differences in terms of T between English and Arabic. The standard assumption is that unlike English, the tense system in Arabic is lacking (Benmamoun, 2000; Aoun et al., 2010). Arabic differentiates between perfect and imperfect tense. While the first is used in the [+past] tense, the latter is used in the [-past] tense. Questions arise as to how the tense morpheme is realized. Benmamoun (2000: 28) argues that tense in the perfect form is realized as an abstract morpheme that is phonologically null. He further argues that the imperfect morphology lacks any temporal or aspectual information. It follows that the imperfect is the realization of a non-finite verb. That is to say, contrary to English, tense in Arabic is not realized by an overt morpheme on the predicate. The affixes attached to the predicate are actually agreement morphemes. In the [+past] tense as in (3 a), agreement is manifested as a suffix; in the [-past] as in (3 b) agreement is manifested as a prefix and a suffix.

(3)   a.   katab-uu

write-3pm.P(erf)

'They wrote.'

ya-ktub-uu

b.   3.IMP(erf)-write-pm

'They write.'

In English, T is marked on all English verbs, namely, thematic, auxiliary and copula verbs. The verbal features associated with T include [±finite], [±past] as well as [±Agr] or φ-features of person and number (White, 2003: 180). Morphological tense marking (Infl) in the structure of every sentence or clause is obligatory in English. The [+past, +finite] tense is overtly marked for most regular and irregular verbs. The [-past, +finite] verb, on the other hand, is supplied with a third person agreement singular marker -s if the subject is third person singular as in *he [play-s]*, however, this morpheme is not present if the subject is plural as in *they [play-Ø]*.

3.1 Thematic Verbs Involving the Features of [+finite, -past]

A verb with the third person agreement singular marker –s (4) is always finite [+finite] (White, 2003: 180). English verbal agreement is commonly described as easy, simple, transparent, and straightforward (Eubank 1994:84, O'Grady, 2006: 3). The following examples explicate this:

(4)   She *writes* [+finite] a lot of letters.

Finite [+finite] thematic verbs are usually associated with T and Agr feature specifications (Chomsky, 1995; Guasti, 2002: 120). In this view, T feature of finite non-past clauses are morphologically specified as [-past] as in the examples in (5), i.e., [+finite, -past] must be broken up into features. The [-past] thematic verbs are spelled out as the non-past tense morpheme -*s*

(5)   Ali *plays* [+finite, -past, +Agr] in the garden every morning.

However, a root or bare form of a verb can either be [+finite] or [-finite]. Bare forms that express the [-past] tense are [+finite]. Example is given below:

(6)   They *write* [+finite, -past, +Agr] a lot of letters.

The [+finite] character of a bare form that expresses the [-past] tense fits with the following fact. When the subject in (6) is replaced by a third-person singular subject, as in (7 a), the bare form of the verb becomes ungrammatical (*) and needs to be replaced with a [+finite] verb with the affixal or third person singular marker–*s* (7 b).

(7) a. * She *write* [-finite, -Agr] a lot of letters.

   b. She *writes* [+finite, -past, +Agr] a lot of letters.

In other words, if the subject is third person singular, the verb in the non-past tense is not raised but inflected with a third person non-past tense agreement singular marker –*s* but if it is plural, this morpheme is not present. Otherwise, it is ungrammatical. In this way, the subject and the affixal inflection –*s* are said to agree in the feature of person and number known as agreement and the affixal inflection –*s* is said to belong to the Infl category agreement (Ouhalla, 1991: 123).

3.2 Be Auxiliary Verb Forms Involving the Features of [+finite, -past]

Besides thematic verbs, *be* auxiliary verb forms also carry T and Agr features (White, 2003: 180). In [-past] tense, the subject and the *be* auxiliary forms which are raised to T (Radford, 2009: 160-161) have to agree in the features of person and number whereby a singular subject takes on a singular *be* form of the *be* auxiliary, i.e., the suppletive form *is* as shown in (8 a). Otherwise, the suppletive forms such as *am* or *are* are used to mark the T and Agr for singular first person or plural subjects as illustrated in (8 b) and (8 c) respectively.

(8) a. He *is* [+finite, -past, +Agr] playing.

   b. I *am* [+finite, -past, +Agr] eating an apple.

   c. Ahmad and Ali *are* [+finite, -past, +Agr] playing.

3.3 The Imperfect/[-past] Tense in Arabic

Arabic tenses do not correspond to English ones. The [-past] tense (i.e. imperfect) in Arabic functions to indicate the present progressive (*be* auxiliary) besides the simple present (9).

(9) ya-ktubu   ?a-TTaalib-u   ?a-ddars-a

   3sm.IMP(erf)-write   the-student-nom   the-lesson-acc

   'The student writes the lesson.'

   'The student is writing the lesson.'   (Example adapted from Benmamoun, 2000: 32)

Verbs in Arabic can agree with subjects in person, number and gender (Ouhalla, 1991). In the [-past] (i.e. imperfect), Agr features are realized by both prefixes and suffixes. The prefixes carry mainly person feature, except in the first person plural, where number is also realized on the prefix, while the suffixes carry mainly number feature (Benmamoun, 2000). By contrast, gender is carried by number if the latter is phonologically realized as is the case in the plural; otherwise it is realized on the person prefix, except in the second person singular feminine, where it is realized by a suffix.

According to Benmamoun's assumptions, both the suffixes and the prefixes that distinguish the Imperfect form from the perfect, as illustrated in (10), are said to correspond to both tense and agreement morphology.

(10) **ya**-drus-**uu**   (Imperfect/[-past])

    3.IMP(erf)-study-pm

    'He studies/ is studying'   (Example adapted from Benmamoun, 2000: 60-61)

However, there is a debate over whether or not the verbal paradigm (in this case, the imperfect) encode a true tense system. Benmamoun (2000) presents a very interesting and convincing argument regarding tense in Arabic. The same explanation is also offered by Aoun et al. (2010: 22-28). Benmamoun argues that Arabic, unlike English, does not have overt T morphemes. His argument is based on the idea that T and Agr are separated in Arabic. That is, the affixes attached to the verbs are Agr morphemes. Benmamoun (2000: 28) argues that T in the imperfect form is realized as an abstract morpheme that is phonologically null. He further argues that imperfect morphology lacks any temporal or aspectual information. It follows that the imperfect is 'simply the realization of a [-finite] verb, i.e. it is the default form of the verb (Benmamoun, 2000: 28).

The imperfect form as argued by Benmamoun (2000) occurs in a large number of syntactic and semantic environments and can be associated with different temporal interpretations. It occurs in the context of the [-past] tense (11 a), future tense (11 b), [+past] tense (context of auxiliary (11 c) and modal (11 d), negative imperative (11 e), and [-finite] clauses (11 f). These examples clearly show that imperfect does not morphologically carry any temporal or aspectual information, contrary to what has been previously claimed.

(11) a. ya-drusu
            3sm.IMP(erf)-study
            'He studies'

      b. sa-ya-drusu
            fut-3sm-study
            'He will study'

      c. kaana   ya-drusu
            be.3sm.P(erf)   3sm-study
            'He was studying./He used to study.'

      d. qad   ya-drusu
            probable   3sm-study
            'He might study.'

      e. laa   ta-drus
            neg   2sm-study
            'Don't study.'

      f. ?araada   ?an   yu-saafira
            want.3sm   to   3sm-travel
            'He wants to travel.'   (Examples taken from Benmamoun, 2000: 28-30)

The reasonable conclusion drawn from these facts is that the imperfect is the default form and that the affixes (the prefix and the suffix) associated with this form are Agr morphemes. Additional elements of information are carried by other elements morphologically attached to or syntactically associated with this form. Like the [+past] tense, Benmamoun suggests that the [-past] tense is also carried by an abstract morpheme (p.30).

4. The Study

This study aims to investigate the consistency of the MSIH in explaining the acquisition of English *be* auxiliary and thematic verb constructions in non-past contexts by adult Arab ESL learners. To do this, the study sets out to:

1. determine the extent to which the adult Arab ESL learners can acquire English *be* auxiliary and thematic verb constructions in non-past contexts.
2. identify the difficulties and the errors that the adult Arab ESL learners display in the production of the English *be* auxiliary and thematic verb constructions in non-past contexts.
3. determine the nature of the adult Arab ESL learners' IL grammar at the L2 ultimate attainment level.

4.1 Participants

Seventy seven (77) adult Arab ESL learners participated in this study. The participants were subdivided into three proficiency groups on the basis of performance on an independent measure of proficiency, the Oxford Placement Test (OPT) (Allan, 1992). Their results revealed that the lowest proficiency group, the lower-intermediate group (LIG) comprised 32 undergraduates while the upper-intermediate group (UIG) consisted of 25 undergraduates. The third group comprised 20 undergraduates who performed at advanced level were classified as the advanced group (AG).

All participants were volunteers, undergraduate students from the science and social science disciplines in two universities in Yemen: Sana'a University and Al-Hodeidah University. Their average age was 22.67 years. All of the participants started learning English at the age of 12 and a few of them at 13 years of age at preparatory/pre-secondary schools. Their average age at first exposure to English was 12.44 years. They studied English for three years before they began secondary school and they continued to learn English at secondary schools. In addition, first year undergraduate students had to learn English as a requirement course at the university level. This means that the learners had had at least seven to eight years of tutored exposure to the English language when they began university level education. However, most learners had very little contact with English outside the classroom and in most cases no contact at all.

4.2 Methodology

Data were collected using an oral production task (ORPT).The ORPT is a picture-based task. The L2 learners were asked to take a couple of minutes to look over the pictures first. Then, they were asked to narrate the story as they looked through the pictures one by one starting with "One day…" and using the verbs and phrases given under each picture. There were no right or wrong answers in this story telling task. The important thing was that they had to say as much as they could. If the learners did not know a particular word in English, they were allowed to ask the instructor. If it was a verb, the instructor provided the learners with the infinitive form and the L2 learners needed to conjugate the verb as necessary.

The learners narrated the story orally based on the pictures. Their oral productions were taped and transcribed. The number of instances of the use of the non-past tense and agreement verbal inflectional morphemes including the third person non-past tense agreement marker –s and the *be* auxiliary verb forms (*am*, *is*, *are*) in obligatory contexts in each participant's oral production were examined and calculated manually**.** Irregular third person forms (e.g. has) that involved a change to the root were not counted to ensure that only forms with –s without change to the root are compared to forms of *be* auxiliary. Firstly, the number of grammatically inflected items (GI) in obligatory contexts was counted and tabulated. Obligatory contexts are those in which the morphemes would normally be used in adult English. Secondly, the number of omission (OI) in obligatory contexts in which each morpheme was omitted by each learner was also calculated and tabulated. In the case of the *be* auxiliary, omission of inflection refers to the absence of the *be* auxiliary verb forms. Omission of inflection in the thematic verbs refers to the absence of the third person non-past tense marker–s. Thirdly, the number of wrongly inflected items (WI) in non-past contexts which included the use of a *be* form for inappropriate person, number or tense as in (*I is cooking* or *they is playing*) and the third person non-past tense marker–s which were used with any subject other than third person singular were counted and tabulated for each participant. The mean percentage of correct production for each set was calculated. Finally, statistical tests were run on the learners' production for each of these sets of related items.

5. Results and Interpretation

5.1 Grammatically Inflected Items (GI)

The grammatically inflected items (GI) include the correct use of English *be* auxiliary and thematic verb inflectional morphemes in non-past [-past] contexts. Table 1 shows the number of obligatory contexts in which [-past] *be* auxiliary and thematic verb constructions were correctly used for each group. The morphemes being examined are the third person singular agreement morpheme –s and the *be* auxiliary forms, *is*, *am*, *are*. Figure 1 is a graph representing the same information in a visually more striking manner.

The data exhibit the accuracy of correct use mean percentages of [-past] *be* auxiliary and thematic verb constructions in finite contexts. The results show that the learners performed better on the thematic verb constructions than on the *be* auxiliary constructions. The learners' performance on GI [-past] thematic verb constructions show that the advanced learners have stabilized at 74.00% for the GI [-past] thematic verb constructions. The performance of the upper-intermediate and the upper-intermediate groups was lower (60.28% and 44.14% respectively). A one-way ANOVA revealed a significant difference among proficiency groups with respect to GI [-past] thematic verbs ($F(2,74)= 5.766$, $p= .007$). Furthermore, Post-hoc Scheffe tests indicated no significant differences ($p>.05$) between the accuracy scores of the learners except between the lower-intermediate and that of the advanced learners.

The results also report low performance on the correct use of GI [-past] *be* auxiliary constructions for the advanced, the upper-intermediate and the lower-intermediate groups (60.00%, 30.00% and 14.89% respectively). A one-way ANOVA showed a significant difference amongst all groups with respect to GI [-past] *be* auxiliary constructions ($F(2,74) = 3.840$, $p= .031$). Post-hoc Scheffe tests showed that the differences between the performance of the advanced and the lower-intermediate groups are significant ($p<.05$). However, no significant differences ($p>.05$) can be identified between the performance of the upper-intermediate group on the one hand and that of the advanced and the lower-intermediate groups on the other.

5.2 Omission Items (OI)

The number and mean percentages for the ungrammatical omission of [-past] *be* auxiliary and thematic verb inflectional morphemes in obligatory contexts are given in Table 2 and Figure 2. In the case of the *be* auxiliary, omission of inflection refers to the absence of the *be* auxiliary forms (i.e. *is*, *am*, *are*) and the absence of the third person non-past tense agreement marker *–s* in the case of the thematic verbs.

In general, the data show that morpheme omission was greater for the [-past] *be* auxiliary forms (27.56%) than for the non-past tense third person agreement morpheme *–s* (25.89%). The advanced learners seemed to make less number of omission of morphemes compared to other groups of learners (10.00% for the OI [-past] *be* auxiliary and 4.00% for the OI [-past] thematic verbs). The lower-intermediate group had the highest score for omission of morphemes (40.43% for the OI [-past] *be* auxiliary and 33.79% for the OI [-past] thematic verbs). The upper-intermediate learners scored 23.33% for the OI [-past] *be* auxiliary and 25.53% for the OI [-past] thematic verbs. These results show that the less advanced L2 learners were still indeterminate in their acquisition and that their performance seemed to indicate that these grammatical properties, particularly the *be* auxiliary forms have not been yet established properly in learners' L2 English IL grammar. However, improvement was observed at the ultimate attainment level where the advanced group exhibited less number of omission of morphemes and in some cases no omission at all. A one-way ANOVA showed significant difference ($p<.05$) among the three groups with respect to the ungrammatical omission of OI [-past] *be* auxiliary verbs ($F(2,74) = 15.379$, $p= .000$) and that of the [-past] thematic verbs($F(2,74) = 6.394$, $P= .003$). Post-hoc Scheffe tests also indicated significant differences ($p<.05$) between the three groups in the production of all sets of items except between the upper-intermediate and the lower-intermediate groups for the OI [-past] thematic verb.

Some instances of the ungrammatical omission of morphemes of *be* auxiliary and thematic verb constructions found in the ORPT are given below:

i. Omission of [-past] *be* auxiliary verb morphemes

*One of the boys (~~is~~) **playing** football with his friends (taken from AG 18)

*All the children (~~are~~) **laughing** and **playing** (taken from UIG 10)

*Two little boys (~~are~~) **playing** football in front of the house (taken from LIG 15)

ii. Omission of the non-past third person singular agreement morpheme *–s*

*The woman **invite**(~~s~~) the two boys (taken from AG 9)

*One of the boys **kick**(~~s~~) the ball away (taken from UIG 4)

*The boy **run**(~~s~~) in the yard to get the ball (taken from LIG 17)

5.3 Wrongly Inflected Items (WI)

The ungrammatical use of [-past] verbal inflectional morphemes include the number of wrongly inflected items in obligatory contexts in which *–s* is used with any subject other than the third person singular, and the *be* auxiliary forms are used for inappropriate person, number or tense. Table 3 presents the mean percentages for the ungrammatical inappropriate/wrong use of [-past] *be* auxiliary and thematic verb inflectional morphemes in obligatory contexts. The same findings are represented in Figure 3.

All groups of learners seemed to make fewer errors (WI) in the use of the non-past third person singular agreement morpheme *–s*, (22.00% for the advanced group, 14.16% for the upper-intermediate group and 22.07% for the lower-intermediate group respectively), than in the non-past *be* auxiliary verb forms, i.e. *am*, *is*, *are*, (30.00% for the advanced group, 46.67% the upper-intermediate group and 44.68% for the lower-intermediate group respectively). In general, the results show that the number and percentage of errors of wrong use of the non-past verbal inflectional morphemes was higher for the WI [-past] *be* auxiliary verb forms (43.31%) than for the non-past third person singular agreement morpheme *–s* (18.75%) across the three groups of learners. A one-way ANOVA indicated no significant difference across all groups with respect to the ungrammatical wrong use of [-past] thematic verb inflectional morpheme ($F(2,74) = 2.407$, $P= .097$). On the other hand, significant difference in the wrong use of WI [-past] *be* auxiliary verbs was found among all groups ($F(2,74) = 6.394$, $P= .003$). Post-hoc Scheffe tests showed no significant differences ($p>.05$) across the three groups' performance with respect to the WI [-past] thematic verb inflectional morpheme. Similarly, Post-hoc Scheffe tests found no significant differences ($p>.05$) between the upper-intermediate and the lower-intermediate groups regarding the WI [-past] *be* auxiliary verbs.

Some instances of the errors indentified in the use of the [-past] *be* auxiliary morphemes and the non-past tense thematic verb inflectional morpheme are given below:

a) Errors indentified in the use of the [-past] *be* auxiliary verbs

i. Wrong *be* auxiliary form (inappropriate number)

*The two boys **is playing** shy (taken from AG 9)

ii.	*-ing* deletion	*After that a lot of children **are laugh** and playing in the yard (taken from UIG 14)
iii.	Suffixation of the non-past third person singular agreement morpheme *–s*	* Once upon time there is one little boy. He **plays** football with his neighbors. Each one is in front of the other (taken from LIG 23)
iv.	Substitution and inappropriate number (past tense *be* auxiliary instead of the [-past] *be* auxiliary)	*Two of the boys are trying to get the ball and a lot of children **was running** after the two boy in the yard (taken from UIG 23)
v.	Substitution (past tense of thematic verb instead of the [-past] *be* auxiliary)	* The boy is playing with the ball and other child **laughed** at him (taken from LIG 4)
vi.	Non-finite of thematic verb form instead of the [-past] *be* auxiliary	* One of the boys is knocking the front door while the other **wait** for him (taken from LIG 23)

In the first two types of errors identified in the ORPT (i and ii), the L2 learners had incorrectly used the *be* auxiliary with the inappropriate number and wrongly deleted the suffix *-ing* to the main verb. These two errors showed the learners' poor mastery of the English [-past] *be* auxiliary verbal system due to its dissimilarity with that of the Arabic. In iii, the L2 learners wrongly added the non-past third person singular agreement morpheme *–s* when it should be. Such error can be explained in terms of L1 influence where the simple non-past tense, the non-past progressive in English correspond to the non-past tense in the learners' L1 (Arabic) system. In other words, continuous actions in English (i.e. *be* auxiliary+ Ving) is expressed in Arabic by the non-past form of the verb which is used to express continuous actions in addition to its habitual meanings. As a result, the learners were indeterminate in choosing the appropriate morphophonological representations in English. Moreover, the L2 learners incorrectly substituted the non-past tense *be* auxiliary with the past tense *be* auxiliary and the simple past tense of the thematic verb in iv and v respectively. They also used the non-finite form of the thematic verb in place of the finite form with *be* auxiliary as shown in vi. All of these errors seem to show that although the L2 learners showed some learning of the English verbal FCs and all associated features, the surface morphology seemed to be problematic for them.

Errors in the use of the non-past third person singular agreement morpheme *–s* included incorrect suffixation (e.g. suffixation of -ing and suffixation of the past tense agreement morpheme *-ed*); substitution (e.g. non- past progressive instead of simple non-past tense) and the overgeneration (OG) of be verb forms.

i.	Suffixation of -ing (V+ing)	*I **running** to get the ball (taken from LIG 29)
ii.	Suffixation of the past tense agreement morpheme *-ed*	*In front of house, there are two little boys playing football. One of the boys **kicked** accidentally the ball over a wall (taken from AG 3)
iii.	Substitution (Non- past progressive instead of simple non-past tense)	*There are two little boys. They are playing in front of house. One of the boys **is kicking** the ball accidentally over a wall (taken from UIG 1)
iv.	Overgeneration of *be* form	* Again, they **are play** football but suddenly one of the boy kicks the ball over a wall (taken from UIG 13)

The above instances including the inappropriate use of *-ing* suffixation, past tense agreement morpheme suffixation, the use of the non-past progressive (*be* auxiliary+Verb) as well as the overgeneration of *be* verb forms were taken from the ORPT data of the adult Arab ESL learners. These errors indicate problems in their L2 surface morphology. The learners have also overgenerated *be* forms. This might be attributed to the fact that unlike the case in English, no overt tense morphemes are available in Arabic. As a result, the learners encounter difficulty mapping the tense features on to the English overt tense morpheme, thus over applying other suffixations that they had already acquired in their IL.

6. Summary and Discussion

Table 4 reviews the oral production findings for the three proficiency groups (the advance, the upper-intermediate and the lower-intermediate groups).The oral production data reveal that Arab ESL learners have shown knowledge of syntactic representation with respect to English *be* auxiliary and thematic verb constructions. The advanced Arab ESL learners, at the ultimate attainment level, have attained 74.00% in the production of the GI [-past]

thematic verb constructions. Although they have stabilized at below 80%, the results indicate that the advanced learners produced only two instances (4.00%) of omission of [-past] thematic verb inflectional morphemes when compared to the inappropriate use (22.00%) of [-past] thematic verb inflectional morphemes. This means that non-past tense is a property that has been established in the learners' L2 English IL grammar; however their inability to produce the correct forms is due to the fact that no overt tense morpheme is available in the L2 learners' L1. Therefore, in the process of their L2 acquisition, the adult Arab ESL learners encountered difficulty mapping the tense features on to the English overt tense morphemes. In other words, [-past] thematic verb morphemes including the non-past third person singular agreement morpheme –s have been acquired by the adult Arab ESL learners, yet the acquisition of the appropriate overt morphemes seemed to be problematic. Generally, the results show that the target tense and agreement morphology with respect to non-past tense and agreement (i.e. the non-past tense third person singular agreement morpheme –s) has been adequately acquired by the adult Arab ESL learners.

As far as the results of the [-past] *be* auxiliary constructions are concerned, the production data indicate that the adult Arab ESL learners exhibited knowledge of the *be* auxiliary constructions. Although they have stabilized at below 80% in the production of [-past] *be* auxiliary verb forms, the adult Arab ESL learners, at ultimate attainment level, demonstrated that they know that the Infl node is fully specified for *be* forms as most of the errors produced by them are errors of inappropriate use rather than that of omission. For instance, the advanced learners seemed to have produced only two instances of omission (10.00%) of [-past] *be* auxiliary. Most of the errors in the use of [-past] *be* auxiliary produced by the learners include the suffixation of the non-past third person singular agreement morpheme –s (e.g. *Once upon time there is one little boy. He **plays** football with his neighbors*). The lack of overt use of *be* forms does not signify that the functional categories of T and Agr and their associated features are lacking. Rather, this error can be explained in terms of L1 influence. A clear difference between the English non-past form of the verb and its Arabic counterpart is that the Arabic non-past form of the thematic verb is always used to express continuous actions (e.g. *be* auxiliary + V*ing* in English) in addition to its habitual meanings. That is why the adult Arab ESL learners were indeterminate in choosing the appropriate English overt morphemes which posed difficulty for them. Generally, the errors in the use of the [-past] *be* auxiliary forms seem to show that the adult Arab ESL learners have acquired the English corresponding functional features; however, the overt morphological realizations seemed to be problematic for them.

Overall, it is established that the adult Arab ESL learners have determined the correct features realized by tense/agreement morphology well before they use them consistently. In general, the results showed that the advanced group performed at marginally higher level than the upper-intermediate group while the upper-intermediate group performed better than the lower-intermediate group in the oral production task. At ultimate attainment level, the advanced learners have shown near native-like competences in the acquisition of the non-past thematic verbs including the third person singular agreement morpheme –s. However, the acquisition of the [-past] *be* auxiliary has posed difficulty for the adult Arab ESL learners and has not been acquired satisfactorily. Interestingly, the results obtained from the paired two-samples t-test between ungrammatical wrongly inflected [-past] *be* auxiliary and that of the [-past] thematic verbs revealed that the difference in the performance of the advanced group is marginally significant (t(19)= 2.032, p=.053). Likewise, paired two-samples t-test also showed that the difference in the ungrammatical wrong use levels of [-past] *be* auxiliary and [-past] thematic verbs is highly significant (p<.05) across all groups collectively (t(76)= 3.480, p= .001).

In the learners' L1, the surface inflectional morphemes are agreement morphemes which carry on the tense features in L1. Therefore, in the process of L2 acquisition, the adult Arab ESL learners encounter difficulty mapping the tense features on to the English overt tense morphemes. It is also obvious that the L2 learners have shown higher proficiency in the use of the thematic verb morphemes including the third person singular morpheme –s which seemed to be mastered and acquired prior to the *be* auxiliary forms.

7. Conclusion

The conclusion that can be drawn here is that the functional categories and features of non-past T and Agr including the *be* auxiliary verbal inflection (*am*, *is*, *are*) and the thematic verb inflection (-s) are available to L2 learners even at the initial lower-intermediate state of L2 acquisition (either from the L1 or from UG). Furthermore, both upper-intermediate group and the advanced group of the ESL learners performed at near native-like levels. There is an observed gradual development in L2 acquisition where it is possible for L2 learners to attain native-like proficiency of the target languages as they and their L2 mature over time.

The results (low rates or percentages for omission and inappropriate use of inflection) in the study which indicate low mismatch and inaccuracy suggest that agreement is in fact in place: when as uninflected form is used, it is always used accurately. As claimed by MSIH, such occurrences of uninflected bare forms (non-finite) are defaults rather than incorrect grammar. In other words, the functional categories and features are accessible to L2 learners; however, the failure to produce the required overt morphology is due to complexity in mapping between surface

forms and underlying abstract features. Thus, the IL syntactic representations in post–critical period L2 acquisition can be native-like and the lack of morphological forms in the IL reflects a problem with the realization of surface morphology, rather than impairment in the domain of functional representations (Prévost and White, 2000).

The findings of the study seem to support the MSIH which advocates full access to UG view and that L2 grammar is not impaired or underspecified with respect to functional categories or features. In other words, the adult Arab ESL learners have full access to UG in that UG principles are fully available in the L2 acquisition even in the initial stage but parameter setting takes time.

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Table 1. Mean Percentages of Correct Use of GI *be* Auxiliary and Thematic Verb Constructions in Obligatory Contexts

Item type	Proficiency Group			(%)
	Advanced N=20	Upper-Intermediate N=25	Lower-Intermediate N=32	
GI [-past] *be* auxiliary	12/20 60.00%	18/60 30.00%	7/47 14.89%	37/127 29.13%
GI [-past] thematic verbs	37/50 74.00%	85/141 60.28%	64/145 44.14%	186/336 55.36%

GI= grammatically inflected items; [-past]= non-past tense

Table 2. Mean Percentages of Incorrect Use of OI *be* Auxiliary and Thematic Verb Constructions in Obligatory Contexts

Item type	Proficiency Group			(%)
	Advanced N=20	Upper-Intermediate N=25	Lower-Intermediate N=32	
OI [-past] *be* auxiliary	2/20 10.00%	14/60 23.33%	19/47 40.43%	35/127 27.56%
OI [-past] thematic verbs	2/50 4.00%	36/141 25.53%	49/145 33.79%	87/336 25.89%

OI= omission items; [-past]= non-past tense

Table 3. Mean Percentages of Incorrect Use of WI *be* Auxiliary and Thematic Verb Constructions in Obligatory Contexts

Item type	Proficiency Group			(%)
	Advanced N=20	Upper-Intermediate N=25	Lower-Intermediate N=32	
WI [-past] *be* auxiliary	6/20 30.00%	28/60 46.67%	21/47 44.68%	55/127 43.31%
WI [-past] thematic verbs	11/50 22.00%	20/141 14.16%	32/145 22.07%	63/336 18.75%

WI= wrongly inflected items; [-past]= non-past tense

Table 4. Summary of Results of All Item Types in the ORPT

Item type	Proficiency Group		
	Advanced N=20	Upper-Intermediate N=25	Lower-Intermediate N=32
GI [-past] be auxiliary	↓	↓	↓
OI [-past] be auxiliary	↓	↓	↓
WI [-past] be auxiliary	↓	↓	↓
GI [-past] thematic verbs	↓	↓	↓
OI [-past] thematic verbs	↓	↓	↓
WI [-past] thematic verbs	↓	↓	↓

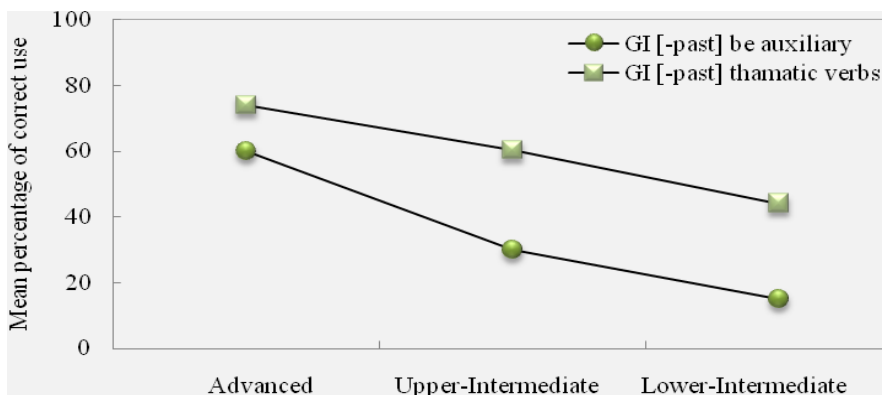↑↑= 90% and above; ↑↓=above 80% and below 90%; ↓= below 80%

Figure 1. Comparison of Results of Correct Use of GI *be* Auxiliary and Thematic Verb Constructions for the 3 Groups
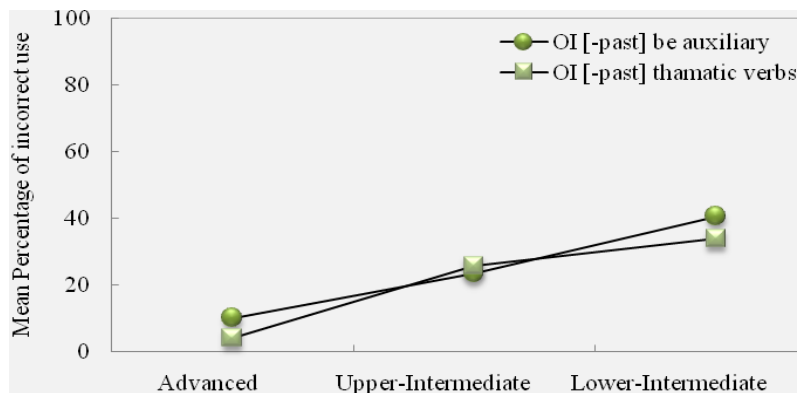

Figure 2. Comparison of Results of Incorrect Use of OI *be* Auxiliary and Thematic Verb Constructions for the 3 Groups
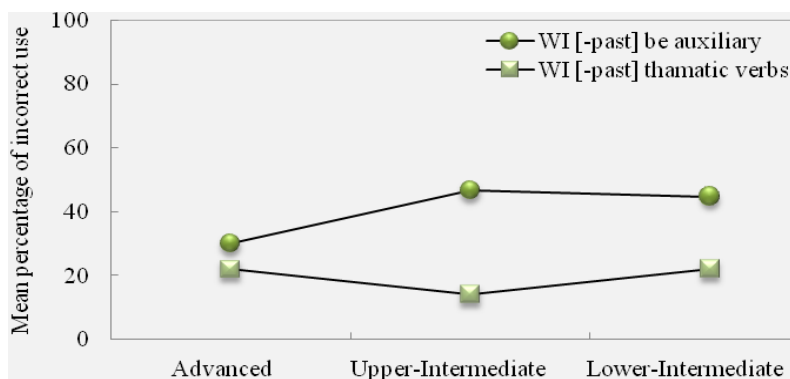

Figure 3. Comparison of Results of Incorrect Use of WI *be* Auxiliary and Thematic Verb Constructions for the 3 Groups