

Current Topics and Controversies in the Analysis of English L2 Learners' Verb Inflection Errors*

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Choe, Mun-Hong & Jung, Mi-Ra. (2021). Current topics and controversies in the analysis of English L2 learners' verb inflection errors. *The Linguistic Association of Korea Journal*, 29(1), 115-137. This article provides a synthetic review of current research on English L2 learners' acquisition of verb inflection, focusing specifically on four topic areas: tense and aspect, subject-verb agreement, lexical and auxiliary verbs, and individual differences. The primary goal is to address the question of what to consider when analyzing ungrammatical forms produced by learners. An additional goal is to gain further insights into such questions as what challenges interlanguage researchers are likely to face in the analysis of the sources of inaccurate forms and what kinds of errors can be regarded as (non-)systematic. This review results in several observations that merit further investigation. First, in the acquisition of tense-aspect morphemes, some general tendencies have been recognized, of which most notable is the fact that L2 learners' ability to use tense-aspect morphology tends to develop gradually while form acquisition normally precedes function acquisition. Second, L2 acquisition of subject-verb agreement has been a central issue in the debate over the role and representation of the innate language faculty. Third, regarding L2 learners' ability to discern lexical and auxiliary verbs, a prevalent UG-based argument is that the mental grammars of L2 learners are organised in the same way as those of L1 speakers and that they differ only in the nature of their lexemes for surface morphology. Finally, since verb inflectional morphology explicitly demonstrates language learners' grammatical competence, variations in its acquisition constitute the core of inquiry into age- and L1-related factors.

Key Words: error analysis, English as a foreign language, verb inflection

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1. Introduction

In the tradition of error analysis (EA), which was originally set forth by Corder (1967), errors should be described objectively in terms of the target language without referring to the learner's first language (L1). Unlike the predictive nature of contrastive analysis (CA), it aims to describe language-learning errors with scientific accuracy so as to eschew a theory-laden diagnosis of errors. Since its inception, L2 learners' developmental sequence in the acquisition of grammatical morphemes has been discussed massively, as manifested in Fathman (1975, 1978), Perkins and Larsen-Freeman (1975), Turner (1978), Lightbown (1980, 1983), Makino (1979), Sajavaara (1981), Pica (1983), and Lakshmanan and Selinker (2001).

In the study of language-learning errors, the classification of errors is the most significant and delicate task (James, 2013). Since the diagnosis and interpretation of errors are derived from a taxonomy system in use, the internal and external validity of error analysis depends heavily on it. In fact, there are no universally applicable criteria for error classification, so researchers often have to develop their own analytical tools (Corder, 1974, 1981; Dulay, Burt, & Krashen, 1982; James, 2013; Unsworth, 2008). For example, Dulay, Burt, and Krashen (1982) classified errors into four hierarchical units: level (phonology, graphology, lexis, grammar, text, and discourse), class (morpheme, word, phrase, clause, and sentence), rank (noun, verb, adjective, preposition, adverb, conjunction, determiner, etc), and system (tense, number, voice, countability, transitivity, etc). For the surface structure taxonomy, five categories were proposed: omission, addition, misformation, misordering, and blends. An updated version is found in James (2013), who suggested a multidimensional taxonomy consisting of five levels of error: substance, text, lexis, grammar, and discourse. He proposed Transfer Analysis (TA) as a sub-procedure of EA that compares L1 with IL, while EA has only been concerned with the differences between IL and TL. The paradigm of error study, according to him, has thereby moved from CA and EA to TA which deals with the triangular relationships among L1, IL, and TL.

Against this backdrop, the present study attempts to reformulate the central issues in the study of L2 learners' acquisition of English verb inflection through a comprehensive survey of previous error studies. The goal is twofold. One is related to the question of what to consider when analyzing (in-)accurate forms produced by learners, especially if the analysis aims to identify the developmental and variable features of acquisition as

compared to those in English L1 acquisition. An additional goal is to gain further insights into such questions as what challenges interlanguage researchers are likely to face in the analysis of the sources of inaccurate forms and what kinds of errors can be regarded as (non-)systematic.

2. Background of the Study

The study of L2 acquisition with a measure of scientific rigor and validity began in the 1950s, when theoretical linguistics redirected much of its focus to the learner's internal competence and natural development (Ellis, 2015). The scope of research in the field has continued to expand in tandem with the advancement of theory, practice, and methodology, while the roles of L1 and an innate language faculty remain to be the most contentious issue. The contrastive analysis hypothesis (CAH) was one of the first formulations of L1 influence on L2 acquisition. Initially proposed by Lado (1957) to predict the degree of difficulty L2 learners would likely experience with a given linguistic item or structure, it emphasized the role of L1 in the process and attainment of L2 acquisition on the basis of L1-L2 similarities and differences, assuming that errors are mainly caused by the interfering effect of L1 on L2 processing.

The CAH was a key instrument in the 1950s and was favored by many researchers until the 1960s. But it had lost popularity by the early 1970s because its assumptions and predictions turned out to be inaccurate.¹⁾ Above all, it could not explain the errors that are not related to L1-L2 contrasts. Richards (1971), for instance, distinguished error types involving verb groups, prepositions, articles, and interrogatives in terms of three different sources. In addition to interlingual errors (L1 negative transfer), he argued that there were intralingual and developmental errors. The former refer to the errors stemming from marked features in the target language and the latter refer to the same problems children experience in acquiring the target language as their first language.

This recognition gave rise to EA in the 1970s. Since the seminal work of Corder (1967), it had flourished over three decades, as seen in numerous publications such as Richards (1974), Corder (1981), Norrish, (1983), and Spillner (1991). During that period, longitudinal studies based on spontaneous speech errors were popular. Their central

1) Though its strong version is no longer tenable, its diagnostic function is still widely practiced in the analysis of interlanguage.

thesis was that instruction and exposure to input did not significantly influence language learners' morpheme acquisition order (Semren, 2017).²⁾ Most notably, a series of studies conducted by Dulay and Burt (1972, 1973, 1974, 1976) and Brown (1973) argued for the universal developmental sequence of grammatical morphemes. In their study of L1-Spanish children's (ages 6-8) acquisition of English morphemes, Dulay and Burt (1973) reported that 85% of the attested errors were of the kind that naturally occurred in the path of development. The acquisition order of three different groups of children were similar to a large extent. In their follow-up study, Dulay and Burt (1974) compared L1-Spanish and L1-Chinese children in L2-English acquisition. The acquisition order of the two groups were identical regardless of their learning styles and environments. Moreover, Larsen-Freeman (1976) investigated 24 adults who had different L1s. Testing the participants' ability to read, write, listen, speak, and imitate in English, she found that L1 did not influence L2 acquisition to a significant degree and that the learners' developmental sequence was alike regardless of their L1. Similarly, Krashen, Butler, Birnbaum, and Robertson (1978) examined 74 college students who spoke different L1s. They analyzed the participants' writing samples. The acquisition order, as measured in terms of accuracy rates, was observed in two different conditions, fast and slow writing. The results were consistent with the earlier findings of Dulay and Burt (1973).

In the 1980s, research based on longitudinal data lost its momentum, and instead quantitative data drawn from elicited production and grammaticality judgement tasks were favored, perhaps due to the problems of temporal and financial constraints on longitudinal studies (Lakshmanan & Selinker, 2001). According to Saville-Troike (2012), the last approach of the early L2 acquisition with an internal focus is Krashen's (1978) Monitor Model. In the early 1990s, however, researchers turned back to longitudinal data in order to investigate the internal process and knowledge representation of L2 learners. Schmidt (1983), Sato (1984), and Ellis (1992) in particular contributed to the development of methodological and interpretive frameworks for the longitudinal case study of interlanguage. They were concerned with the psychological processes of L2 learners and studied them through qualitative observations (Bardovi-Harlig, 2000). Currently, the investigation centers on the developmental aspects of functional categories and morphosyntactic features based on natural longitudinal data. Moreover, the study of L2

2) Nevertheless, a few studies suggested that the L2 acquisition order might be different from the L1 order (e.g., Bailey, Madden, & Krashen, 1974) and that a considerable difference would arise in the order depending on the measurement task (Larsen-Freeman, 1975).

learners' non-normative forms and uses has been enhanced by combining corpus linguistics and computer utility programs (McEnery, Xiao, & Tono, 2006).

There have been a few studies on Korean EFL learners' acquisition of verb morphology. For example, Hwang (1999) examined Korean L1 speakers' use of English unaccusative verbs, and Hahn (2001, 2009) analyzed their overuse, underuse, and interlingual variation of copula *be*. Most recently, Lee (2016) investigated the acquisition of past tense forms by Korean elementary school students and Kim (2017) compared child and adult learners' acquisition of agreement V-s. However, these studies focused only on one or two specific elements, so they did not show any systemic relationship or developmental concurrence of multiple structural elements.

The domestic studies in the guise of error analysis were quite different in their orientation and methodology. In the Korean EFL context, students tend to start learning listening and reading skills simultaneously and they do not have sufficient spoken input from interactive conversations. It is thus difficult to collect their spontaneous speech samples. Consequently, most studies were conducted in a school setting, focusing on learners' error types and frequencies in written language (e.g., Kim, 2012; Lim, 2005; Seo, 2003; Song, 2013; Song & Kim, 2016; Song & Lee, 2006). They assume, either implicitly or explicitly, that written language is more self-monitored and hence better reflective of the learner's linguistic competence. With the surge of bilingual immersion programs and ELT institutes for young learners, there is now a growing population of learners whose speaking ability develops far earlier than literacy skills. Recent error analytic studies thus began to explore speech errors produced in non-instructional settings (e.g., Kang & Oh, 2016; Lee, 2010, 2013, 2016; Lee, 2017).

Research in ESL contexts mainly focuses on child learners' acquisition of structural elements in comparison with adult learners on the basis of the interlanguage hypothesis or various versions of UG accessibility and L1 transfer (e.g., Blom, 2008; Jia & Fuse, 2007; Unsworth, 2008). More recently, an increasing number of studies have been undertaken on simultaneous bilingualism and multilingualism (e.g., Armon-Lotem, Adam, & Walters, 2008; Basnight-Brown, Chen, Hua, Kostić, & Feldman, 2007; Cenoz & Genesee, 1998; Cho & Tong, 2014; Chondrogianni & Marinis, 2012; Döpke, 1998; Griswold, 2017; Marinis & Chondrogianni, 2010; Paradis, 2007, 2010). In Korea, however, the great majority of error studies have been conducted with college students. This is most probably because so small a proportion of child learners can produce a sizable amount of written language for analysis. The second largest group was primary and

secondary school students, of which the investigation was conducted almost entirely from a practitioner's perspective (Kim, 2012; Kwon, 2014; Lim, 2005; Park, 2007; Seo, 2003; Song, 2013). Pre-school children have been given scant attention. Besides, error studies in the Korean EFL context prefer to take cross-sectional and experimental approaches for both child and adult learners. Although there were several longitudinal case studies on Korean L1 speakers' language development in ESL contexts (e.g., Kim, 2002; Kim, 2003; Kwon, 2016; Lee, 2004; Lee, 2011; Lee, 2019), few were carried out with those in EFL contexts.

As a final remark, there are no definite boundaries of error types. Thus, classifying them is an unstable task, not to mention that individual learners' error types and tokens continue to change over time. As mentioned earlier, one widely cited taxonomy is that of Dulay, Burt, and Krashen (1982). They classified errors into four hierarchical units: level (phonology, graphology, lexis, grammar, text, and discourse), class (morpheme, word, phrase, clause, and sentence), rank (noun, verb, adjective, preposition, adverb, conjunction, determiner, etc), and system (tense, number, voice, countability, transitivity, etc). For the surface structure taxonomy, five categories were proposed: omission, addition, misformation, misordering, and blends. The most up-to-date discussion of EA is found in James (2013), who suggests a multidimensional taxonomy consisting of five levels of error: substance, text, lexis, grammar, and discourse. He further proposes transfer analysis (TA) as a sub-procedure of error analysis that compares L1 with IL, while traditionally EA has only been concerned with the differences between IL and TL. The paradigm of error study, according to him, has thus moved from CA and EA to TA which deals with the triangular relationships among L1, IL, and TL.

3. L2 Acquisition of English Verb Inflection

Since verb inflection is the most obvious indicator of language learners' development in syntactic competence, its acquisition has been the subject of intensive research. In the sections that follow, a synthetic review is presented of four central topics of research into English L2 learners' acquisition of verb inflection: tense and aspect, subject-verb/auxiliary agreement, thematic (lexical) and auxiliary verbs, and learner differences. This is expected to provide a basis on which the findings of research in the area can be evaluated properly in a theoretical framework.

3.1. Tense and Aspect

An overview provided by Haznedar and Gavrusseva (2008) revealed that the contemporary studies of L2 acquisition were paying more attention to verbal morphology, case morphology, determinatives, word order patterns, and anaphora (e.g., Brouwer, Cornips, & Hulk, 2008; Chondrogianni, 2008; Ionin & Wexler, 2002; Mobaraki, Vainikka, & Young-Scholten, 2008). One major component of verbal morphology that has received relatively more attention is tense-aspect inflections. Research shows that the grammatical notions and forms associated with time present a complexity for L2 learners and that their intuitions about morphological references to deictic temporality may not be developed despite several years of training (Pancheva & Stechow, 2004).

L2 learners' development in ability to use the tense-aspect system has been investigated through both meaning- and form-oriented approaches. While the former is concerned more with the lexical and pragmatic meaning of temporal expressions, the latter seeks to account for the acquisition order of tense-aspect morphemes in relation to lexical aspects and narrative contexts (Bardovi-Harlig, 2000). These form-oriented studies are qualitatively different from the earlier morpheme acquisition studies in that they tend to be designed longitudinally with acquisition being assessed in terms of emergence rather than a threshold level of accuracy (e.g., over 90% in obligatory contexts).

One of the pioneering studies was Bardovi-Harlig (1992a), where she investigated the associations of form and meaning in the developing tense and aspect systems of adult ESL learners. A cross-sectional analysis was conducted with learners at six levels of proficiency using a cloze passage and compositions on the same topic. The interlanguage tense and aspect systems showed high formal accuracy, but low levels of appropriate use. She concluded that they seemed to connect form and meaning through alternative hypotheses related to lexical aspect and discourse function. This so-called aspect hypothesis posits that L2 learners' early use of tense-aspect morphology patterns by semantic/aspectual features of verbs. In her subsequent study (Bardovi-Harlig, 1995), she examined if narrative structure influences the distribution of tense-aspect forms in interlanguage. The study analyzed written and oral narrative pairs produced in a film-retell task by adult ESL learners from two perspectives, one from the perspective of acquisition and the other from the perspective of the narrative itself. The results provided evidence for a developmental sequence in the distribution of tense-aspect morphology with respect to narrative structure.

In a similar vein, Gavrusseva (2004) claims that inherent aspectual properties of the verbs such as telicity and punctuality determine which verbs are more likely to be finite or non-finite in child L2 acquisition. She investigated the emergence of finiteness in early L2 English of five consecutive bilinguals (ages 6 to 9) under the assumption that non-finite forms result from the underspecification of aspectual heads at the initial state of interlanguage. She argued that English lacks genuine perfective and imperfective morphemes and so makes use of a variety of aspectual features such as intrinsic and compositional telicity features. Correlatively, an English verb's telicity semantics defines its aspectual class and predicts its finiteness status in children's early grammar. An advantage of this account is that it explains why stative and punctual eventives show higher finiteness rates than nonpunctual eventives in child L2 data. Haznedar (2007) subsequently tested these hypotheses with longitudinal data from a Turkish child learner of L2 English and presented some counterevidence. Despite the fact that the early production of past tense morphology occurs exclusively with punctual predicates, the learner's use of copula *be*, auxiliary *do*, and pronominal subjects did not show any evidence for defective tense. Second, contrary to Gavrusseva's underspecified aspect hypothesis, the rate of uninflected punctual verbs was much higher than that of uninflected non-punctual verbs in the child L2 grammar.

In form-oriented views, an important contribution was made by Klein (1995), who longitudinally observed the development of tense-aspect morphology of two Italian and two Punjabi English learners. The learners' personal narratives, film retelling, and conversations were recorded for three years. There was some learner-specific variation due to differences in lexical richness, but L1 influence on their acquisition and use of basic verb forms was limited. Some learners ceased to develop while others strived to become more target-like. Two causal factors were suggested: communicative efficiency and the social need to sound like the environment (i.e., input mimicking), with the latter being the stronger one. The researcher noted that the fact that form often precedes function cannot be explained by the learners' tendency to make the language more functional, but reflects their wish to sound like the environment.

Another noteworthy study is Paradis (2008), who investigated Chinese L1 children's use of finite and non-finite morphology in L2 English. Seven children were under typical language development and two had language delay/impairment in L1 Chinese. The children's spontaneous speech data were analysed with a focus on four finite morphemes: third person singular *V-s*, regular past tense *V-ed*, copula/auxiliary *be*, and

auxiliary *do*. The aim was to ascertain whether the extended optional infinitive (EOI) account would characterize the acquisition patterns displayed by the affected children. The investigation identified three general patterns of acquisition. First, the acquisition of tense morphology was gradual in both children with typical language development and language delay/impairment. Second, one impaired child displayed the extended optional infinitive characteristics of specific delay with tense morphemes. The two children with language delay/impairment displayed a hybrid pattern between typical child L2 English and L1-based EOI characteristics. Third, the dissimilar patterns between L1 and L2 impaired acquisition appeared to be caused by the difference in age of English acquisition onset. The researcher claimed that tense morphemes function as a clinical indicator in impaired L2 as well as L1 English.

Research also shows that tense-marking morphemes are associated with the aspectual morpheme *V-ing* and the plural morpheme *N-s* in both L1 and L2 acquisition research (de Villiers & de Villiers, 1973; Jia & Fuse, 2007; Paradis, 2005; Rice & Wexler, 1996; Rice, Wexler, & Cleave, 1995; Rice, Wexler, & Hershberger, 1998; Zobl & Licerias, 1994). All in all, four general tendencies were recognized in the acquisition of the tense-aspect morphemes. First, L2 learners' ability to use the grammatical tense-aspect morphology develops slowly and gradually. Second, form acquisition precedes function acquisition. Third, irregular morphology is acquired prior to regular morphology. Lastly, verbs inflected with suffixes develop earlier than auxiliary verbs (see Semren, 2017 for an extensive discussion).

3.2. S-V/AUX Agreement

L2 learners' acquisition of subject-verb/auxiliary agreement in English has been a central issue in the debate over the role and representation of the innate language faculty. The argumentation presented by Ionin and Wexler (2002) is a typical example. They investigated L1-Russian child ESL learners' omission of verbal inflection. Analyzing the learners' spontaneous production data, they found that the learners almost never used incorrect tense/agreement morphology and that they used suppletive inflection at a significantly higher rate than affixal inflection. Moreover, they overgenerated *be* in utterances lacking progressive participles. A grammaticality judgement task of English tense/agreement morphology revealed that the learners were more sensitive to the *be* paradigm than to inflection on thematic verbs. Based on these observations, they argued that functional categories were present in the initial state of interlanguage despite their

surface absence. That is, TP/AgrP are present in the learners' grammar and they may be morphologically (erroneously) realized through forms of *be*. It was further suggested that L2 learners initially associate morphological agreement with verb-raising and thus acquire forms of *be* before inflectional morphology on in-situ thematic verbs.

It has been reported that L2 learners of English use finite forms of *be* frequently, but with a range of meanings not found in the input they are exposed to. They use *V-ed* and *V-s* forms infrequently, but mostly appropriately. In line with Ionin and Wexler (2002), Hawkins (2007) holds that this behaviour cannot be regarded simply as knowledge merging from the learning of salient and frequent forms in input without reference to innate knowledge. He instead proposed a nativist account where the phenomena ensue from learners using innately-known interpretable (but not uninterpretable) features to create lexemes of the kind proposed by Distributed Morphology. Since these lexical entries are created based on context-sensitive co-occurrence information rather than the feature content of single syntactic terminal nodes, they are qualitatively different from those of native speakers. The proposed hypothesis was tested through an oral sentence completion task that systematically disrupts linear co-occurrence patterns and a pilot study of how L2 learners use *V-s* as a cue to the interpretation of the number feature of the subject. The results, it was claimed, lent support to the proposal that the lexemes of L2 learners at an early stage of development are qualitatively different from those of L1 speakers.

Another relevant study is Geçkin and Haznedar (2008), who examined longitudinal data from three L1 Turkish children acquiring L2 English with a focus on *be*, subject-verb agreement *V-s*, regular and irregular tense marking, overt/null subjects, and nominative subject pronouns in obligatory contexts. They developed a classification scheme for morphosyntax to determine whether morphological variability implies syntactic impairment, or the lack of inflection is attributable to problems associated with surface morphology. Three children at age 4;5 participated in the study. Their first exposure to English was around at age 3;5. Since then, they were regularly given English L1 speakers' input about 6 hours a day. Data were collected for 7 months through picture elicitation tasks and analyzed through CHILDES conventions (MacWhinney & Snow, 1990). The children rarely used agreement morphemes for inappropriate tense, person, and number. Although there were many uninflected verb forms, there was no evidence of inflections being used incorrectly. This absence of inflected errors was claimed to indicate that acquisition of syntax does not depend on

the prior acquisition of morphology.

Naturally, there is a range of arguments against such nativist accounts, particularly from the view of cognitive and functional linguistics. To take one example, Blom, Paradis, and Duncan (2012) investigated child ESL learners' development of subject-verb agreement *V-s*. Adopting the usage-based perspective on the learning of inflection, the researchers analyzed spontaneous speech samples collected from 15 children who were followed for 2 years. Assessing the contribution of a wide range of factors, they showed that word frequency, allomorphs, lexicon size, L1 inflectional properties, and months of exposure to L2 all had impact on the children' use of *V-s* in obligatory contexts. This finding seems to support a usage-based approach to learning inflection and the importance of a multifactorial analysis of language development.

3.3. Lexical (Thematic) and Auxiliary Verbs

In this area of research, again at issue is the fact that learners tend to supply forms of copula *be* more frequently than auxiliary *be*, and both more frequently than affixal *V-ed* and *V-s* in obligatory contexts. Moreover, though rarely applying *V-ed* and *V-s* to inappropriate contexts, they use a construction not found in input such as *be + V_{root}* (e.g., *I'm read*) quite generally. As aforementioned, a prevalent UG-based argument is that the mental grammars of early L2 learners are organised in the same way as those of L1 speakers and that they differ only in the nature of their lexemes for surface morphology. This difference correlates with an early underspecification of syntactic representations where uninterpretable features are absent from syntactic expressions (Hawkins & Casillas, 2008).

The acquisition of syntactic distinction between lexical and auxiliary verbs in L2 English has been least attended by researchers. The existing studies only partially dealt with the issue. Ionin (2008), for example, studied *V-ing* and *V_{root}* forms in progressive contexts produced by L1-Russian L2-English children (ages 5 to 11). She assumed that child ESL learners are guided by the Uniqueness Principle, leading them to restrict *V-ing* forms to progressive contexts and *V_{root}* forms to non-progressive contexts; that is, aspect morphology and finiteness morphology develop separately in child ESL acquisition. She put forward three concrete hypotheses: (1) Once child ESL learners start using *V-ing* forms, they use them with an ongoing interpretation. (2) They assign the same aspectual interpretation to *be + V-ing* forms as to *V-ing* forms without *be* since the ongoing interpretation of *V-ing* is acquired independently of finiteness morphology. (3) As they

acquire the progressive interpretation of *V-ing* forms, they restrict V_{root} forms to non-progressive readings. The children's utterances of the *V-ing* suffix were coded for the presence or absence of auxiliary *be* and for temporal-aspectual import. Besides, present tense verbs were coded for finiteness and for aspectual interpretation. Three main findings were reported. First, once the children acquired the *V-ing* form, they used it appropriately with an ongoing interpretation. Second, *V-ing* forms without *be* were used with the same aspectual meaning as were *be + V-ing* forms, and generally *V-ing* was acquired before *be + V-ing*. Third, *V-ing* forms were used with a progressive reading whereas V_{root} forms were largely restricted to non-progressive environments. Also, the learners sometimes overused *be* with a V_{root} , producing sentences like *he is want* and *she is go*. Drawing upon these, she concluded that there was no relationship between the acquisition of progressive aspect and finiteness morphology.

An important source of evidence for innate grammar was sought by Gavrusseva (2008), who attended to the asymmetry in the acquisition of copula and auxiliary *be* in a corpus of L2 English. She argued that the delay in the productive use of auxiliary *be* as compared to that of copula *be* could be given an explanation by positing an underspecified AspP in early grammar, viz., structures requiring aspectual specification appear in a non-finite form because aspectual features are not specified yet. She collected longitudinal data from five child ESL learners with different L1 backgrounds. Their elicited utterances were recorded for 3-8 months. The learners' use of *be* was closely observed in terms of its aspectual constraints, inflectional morphology, and overgeneration. The study confirmed that auxiliary *be* developed more slowly than copula *be* as predicted. Moreover, L1 effects were observed only in the acquisition of auxiliary *be*, but not in the acquisition of copula *be*. Based on the fact that aspectual errors occurred while copula *be* was used in a target-like way, the author concluded that the predictions of the underspecified AspP hypothesis were borne out.

Finally, in a non-nativist psycholinguistic point of view, McDonald and Roussel (2010) explored whether ESL learners' poor mastery of inflectional morphology is tied to difficulties with non-syntactic processing. They employed two experimental procedures to address whether problems with English regular and irregular past tense are associated with poor L2 phonological ability and lexical access. In the first experiment, L2 speakers showed poorer past tense mastery than L1 speakers in grammaticality judgment and production tasks. L2 phonological ability was positively correlated with correct performance on regular verbs. L2 lexical access was positively correlated with correct

performance on irregular verbs, and negatively with overgeneralization errors. The second experiment simulated these difficulties by placing English L1 speakers under phonological processing (noise) or lexical access (deadline) stress. Noise selectively impacted regular verbs in grammaticality judgment but impacted both regular and irregular verbs in production. Deadline pressure impacted irregular verbs while sparing regular verbs across both tasks. The researchers concluded that non-syntactic processing difficulties influence L1 and L2 speakers' morphological performance.

3.4. Learner Differences:

Child-Adult and Sequential-Simultaneous Bilinguals

Since verb inflectional morphology is an explicit barometer of language learners' grammatical competence, learner variation in its acquisition constitutes the core area of research into age- and L1-related factors. For example, from a generative perspective, Blom (2008) compared Turkish and Moroccan child and adult learners' acquisition of L2 Dutch inflectional morphology and syntax with the purpose of testing Schwartz's (2003) claim that child L2 acquisition is more like child L1 acquisition in the domain of inflectional morphology while in the domain of syntax, child L2 acquisition is more like adult L2 acquisition. This generalization presumes that inflection is influenced by age of onset while syntactic knowledge is not. There was no significant influence of L1 transfer. The child L2 data of syntax were similar to child L1 data. Thus, the results discredited the claim that child L2 acquisition was more like adult L1 acquisition in the domain of syntax.

One of the most well-known longitudinal studies concerning age-related learner differences is Jia and Fuse (2007). They investigated the acquisition of six English grammatical morphemes, i.e., regular and irregular past tense, *V-s*, *V-ing*, copula *be*, and auxiliary *do*, by 10 Mandarin L1 children and adolescents in the United States. The learners' acquisition trajectories and levels of attainment across the target morphemes were compared. It turned out that their performance variation was partially predicted by age of arrival in the United States, with early arrivals achieving greater proficiency than late arrivals. However, such age effects arose several years after arrival and existed only for two morphemes: *V-s* and regular *V-ed*. There was no significant age-related difference in the acquisition of other morphemes nor in error types. The researchers noted that learning environment was a stronger predictor of individual differences than age of arrival, setting forth an environmental account for individual differences in the

acquisition of L2 morphosyntax.

This empiricist view was echoed by Paradis (2010), who investigated bilinguals' interim knowledge and use of grammatical morphemes such as V-s, regular/irregular past tense, and copula/auxiliary *be*. She examined whether monolingual-bilingual differences in the production of English verb inflectional morphology would be influenced by amount of exposure to English, complexity of the morphological structure, or the type of task. French-English bilingual children were given a standardized test with two production probes and a grammaticality judgment task for English verb morphology. All three factors appeared to influence how closely bilinguals approached the monolingual norms. The researcher concluded that the findings were consistent with Gathercole's (2007) constructivist model of bilingual acquisition.

With regards to comparing child and adult learners' grammatical knowledge and performance, Unsworth (2008) pointed out that their language ability cannot be assessed properly by learner-independent dichotomous (accurate-inaccurate) measurements. Her Age-Sensitive Composite Proficiency Score (ASCOPS) takes into account three learner-internal variables: age, L1 transfer, and L2 proficiency. She also argued that if defined simply as the rate of error-free utterances in obligatory contexts, accuracy cannot adequately reflect the learner's true competence. Instead, researchers should pay more attention to repeated and pervasive errors at different developmental stages. Unsworth's suggestion for tackling this problem is to count repeated errors separately.

In a somewhat different direction, an increasing body of evidence indicates that L2 learners exhibit difficulties and error types similar to L1 children with specific language impairment. Basnight-Brown et al. (2007), for example, used a cross-modal priming procedure to examine English monolingual and bilingual (Serbian-English and Chinese-English) speakers' processing of regular and irregular verbs. Experimental stimuli included stem-nested (draw-drawn) and stem-changed (run-ran) irregular verbs and regular present-past tense pairs that were either low (guide-guided) or high (push-pushed) in resonance, a measure of semantic richness. English L1 speakers exhibited comparable facilitation across regularity and greater facilitation for stem-nested than stem-changed irregulars. Similarly, Serbian-English speakers showed facilitation due to form overlap but Chinese-English speakers did not, implying L1 effects on L2 inflectional processing. Interestingly, unlike L1 speakers, neither L2 group showed reliable facilitation to stem-changed irregulars.

It seems that current studies prefer to take more eclectic approaches in both theory

and methodology. Chondrogianni and Marinis (2012), for example, investigated the production and processing of English tense morphemes by 39 Turkish L1 children (ages 6 to 9). The participants were asked to do the production component for *V-s* and *V-ed* of the Test for Early Grammatical Impairment (Rice & Wexler, 2001) and participated in an online word monitoring task involving grammatical and ungrammatical sentences with presence/omission of tense (*V-s*, *V-ed*) and non-tense (progressive *V-ing*, possessive *N-'s*) morphemes. The L2 children's performance on the online task was compared to that of children with specific language impairment to ascertain similarities and differences between the two groups. They found that L2 children were sensitive to the ungrammaticality induced by the omission of tense morphemes, despite variable production. According to them, this supports the position that child L2 learners have intact underlying syntactic representations although their production might not be target-like.

4. Conclusion

This summative review of previous studies on English L2 learners' acquisition of verb inflection leads to the following conclusions and proposals. First, in the acquisition of tense-aspect morphemes, some general tendencies have been recognized and widely discussed. Most notably, L2 learners' ability to use the grammatical tense-aspect morphology develops gradually while form acquisition normally precedes function acquisition. Second, L2 acquisition of subject-verb agreement has been a central issue in the debate over the role and representation of UG. Learners tend to supply forms of copula *be* more frequently than auxiliary *be*, and both more frequently than affixal *V-ed* and *V-s* in obligatory contexts. Moreover, though rarely applying *V-ed* and *V-s* to inappropriate contexts, they use a construction not found in input such as *be + V_{root}*. Third, regarding L2ers' ability to discern lexical and auxiliary verbs, a prevalent UG-based argument is that the mental grammars of L2 learners are organised in the same way as those of L1 speakers and that they differ only in the nature of their lexemes for surface morphology. Finally, since verb inflectional morphology serves as the most observable measure of language learners' grammatical competence, learner variation in its acquisition constitutes the core area of research into age- and L1-related factors.

These observations lead to some suggestions for future research. In Korean EFL context, for example, learners usually rely on written input with limited exposure to

output and interaction opportunities. Therefore, the emergence and accuracy development of their interlanguage should be investigated in terms of frequency change in the occurrence of a verb form alongside its formal and functional adequacy in the context. It also seems imperative to give more research attention to the development of an optimal coding scheme for error classification whereby detailed diachronic descriptions and comparisons between learners (and learner groups) are made in a tractable and consistent way.

References

- Ashwell, T. (2000). Patterns of teacher response to student writing in a multiple-draft composition classroom: Is content feedback followed by form feedback the best method? *Journal of Second Language Writing*, 9, 227-258.
- Bardovi-Harlig, K. (1992a). The relationship of form and meaning: A cross-sectional study of tense and aspect in the interlanguage of learners of English as a second language. *Applied Psycholinguistics*, 13, 253-278.
- Bardovi-Harlig, K. (1995). A narrative perspective on the development of the tense/aspect system in second language acquisition. *Studies in Second Language Acquisition*, 17, 263-291.
- Bardovi-Harlig, K. (2000). Tense and aspect in second language acquisition: Form, meaning, and use. *Language Learning*, 50(1), 191-275.
- Basnight-Brown, D. M., Chen, L., Hua, S., Kostić, A., & Feldman, L. B. (2007). Monolingual and bilingual recognition of regular and irregular English verbs: Sensitivity to form similarity varies with first language experience. *Journal of Memory and Language*, 57(1), 65-80.
- Blom, E. (2008). Testing the domain-by-age model. In B. Haznedar & E. Gavrusseva (Eds.), *Current trends in child second language acquisition: A generative perspective* (pp. 271-300). Philadelphia, PA: John Benjamins Publishing.
- Blom, E., Paradis, J., & Duncan, T. S. (2012). Effects of input properties, vocabulary size, and L1 on the development of third person singular -s in child L2 English. *Language Learning*, 62(3), 965-994.

- Brown, R. (1973). *A first language: The early stages*. Cambridge, MA: Harvard University Press.
- Burt, M. K. (1975). Error analysis in the adult EFL classroom. *TESOL Quarterly*, 9(1), 53-63.
- Chondrogianni, V., & Marinis, T. (2012). Production and processing asymmetries in the acquisition of tense morphology by sequential bilingual children. *Bilingualism: Language and Cognition*, 15(1), 5-21.
- Corder, S. P. (1967). The significance of learner's errors. *International Review of Applied Linguistics in Language Teaching*, 5, 161-170.
- Corder, S. P. (1974). Error analysis. In J. P. B. Allen & P. Corder (Eds.), *The Edinburgh course in applied linguistics*, vol. 3 - *Techniques in applied linguistics* (pp. 122-131). London: Oxford University Press.
- Corder, S. P. (1981). *Error analysis and inter-language* (Vol. 112). Oxford: Oxford University Press.
- De Villiers, J. G., & De Villiers, P. A. (1973). A cross-sectional study of the acquisition of grammatical morphemes in child speech. *Journal of Psycholinguistic Research*, 2(3), 267-278.
- Dulay, H. C., & Burt, M. K. (1973). Should we teach children syntax? *Language Learning*, 23(2), 245-258.
- Dulay, H. C., & Burt, M. K. (1974a). Errors and strategies in child second language acquisition. *TESOL Quarterly*, 8(2), 129-136.
- Dulay, H. C., & Burt, M. K. (1974b). Natural sequences in child second language acquisition. *Language Learning*, 24(1), 37-53.
- Dulay, H. C., Burt, M. K., & Krashen, S. D. (1982). *Language two*. New York: Oxford University Press.
- Ellis, R. (1992). Learning to communicate in the classroom: A study of two language learners' requests. *Studies in Second Language Acquisition*, 14(1), 1-23.
- Ellis, R. (2015). *Understanding second language acquisition*. Oxford: Oxford University Press.
- Fathman, A. (1975). The relationship between age and second language productive ability. *Language Learning*, 25(2), 245-253.
- Fathman, A. (1978). ESL and EFL learning: Similar or dissimilar. *On TESOL*, 78, 213-223.

- Gathercole, V. M. (2007). Miami and North Wales, so far and yet so near: A constructivist account of morphosyntactic development in bilingual children. *International Journal of Bilingual Education and Bilingualism*, 10(3), 224-247.
- Gavruseva, E. (2004). Root infinitives in child L2 English: An aspectual features account. *Second Language Research*, 20(4), 335-371.
- Gavruseva, E. (2008). The development of copula and auxiliary *be* and overgeneration of *be* in child L2 English. In B. Haznedar & E. Gavruseva (Eds.), *Current trends in child second language acquisition: A generative perspective* (pp. 145-177). Philadelphia, PA: John Benjamins Publishing.
- Geçkin, V., & Haznedar, B. (2008). The morphology/syntax interface in child L2 acquisition. In B. Haznedar & E. Gavruseva (Eds.), *Current trends in child second language acquisition: A generative perspective* (pp. 237-271). Philadelphia, PA: John Benjamins Publishing.
- Hahn, H.-R. (2000). *UG availability to Korean EFL learners: A longitudinal study of different age groups*. Unpublished doctoral dissertation, Seoul National University, Korea.
- Hahn, H.-R. (2001). The status of *be* in developing learner language. *Journal of Pan-Pacific Association of Applied Linguistics*, 5(2), 241-52.
- Hahn, H.-R. (2009). EFL learners' "Be": Overuse, underuse, and variation. *Korean Journal of Applied Linguistics*, 25(3), 139-168.
- Hawkins, R. (2007). Emergent and innate sources of knowledge in the early L2 acquisition of English verbal morphology. In A. Radford (Ed.), *Martin Atkinson –The minimalist muse* (pp. 135-156). Essex Research Reports in Linguistics, University of Essex, Colchester, UK.
- Hawkins, R., & Casillas, G. (2008). Explaining frequency of verb morphology in early L2 speech. *Lingua*, 118(4), 595-612.
- Haznedar, B. (2007). The acquisition of tense-aspect in child second language English. *Second Language Research*, 23(4), 383-417.
- Haznedar, B., & Gavruseva, E. (Eds.). (2008). *Current trends in child second language acquisition: A generative perspective*. Philadelphia, PA: John Benjamins Publishing.
- Hwang, J.-B. (1999). L2 acquisition of English unaccusative verbs under

- implicit and explicit learning conditions. *English Teaching*, 54(4), 145-176.
- Ionin, T. (2008). Progressive aspect in child L2-English. In B. Haznedar & E. Gavruseva (Eds.), *Current trends in child second language acquisition: A generative perspective* (pp. 17-53). Philadelphia, PA: John Benjamins Publishing.
- Ionin, T., & Wexler, K. (2002). Why is 'is' easier than '-s'? Acquisition of tense/agreement morphology by child second language learners of English. *Second Language Research*, 18(2), 95-136.
- James, C. (2013). *Errors in language learning and use: Exploring error analysis*. New York, NY: Routledge.
- Jia, G., & Fuse, A. (2007). Acquisition of English grammatical morphology by native Mandarin-speaking children and adolescents: Age-related differences. *Journal of Speech, Language, and Hearing Research*, 50, 1280-1299.
- Kim, K. T. (2017). Acquisition of the third person singular -s by L1-Korean adult/child learners of English. *Korean Journal of Applied Linguistics*, 33(1), 3-27.
- Kim, E.-M. (2012). Error analysis in Korean elementary school students' English diaries. Unpublished master's thesis, Chonnam National University, Kwangju, Korea.
- Klein, E. C. (1995). Evidence for a 'wild' L2 grammar: When PPs rear their empty heads. *Applied Linguistics*, 16(1), 87-117.
- Krashen, S. D., Butler, J., Birnbaum, R., & Robertson, J. (1978). Two studies in language acquisition and language learning. *International Journal of Applied Linguistics*, 39(1), 73-92.
- Kwon, B.-R. (2014). An analysis of writing errors among Korean middle school EFL learners. Unpublished master's thesis, Chonnam National University, Kwangju, Korea.
- Lado, R. (1957). *Linguistics across cultures: Applied linguistics for language teachers*. Ann Arbor, Michigan: University of Michigan Press.
- Lakshmanan, U., & Selinker, L. (2001). Analysing interlanguage: How do we know what learners know? *Second Language Research*, 17(4), 393-420.
- Larsen-Freeman, D. E. (1975). The acquisition of grammatical morphemes by adult ESL students. *TESOL Quarterly*, 9(4), 409-419.
- Larsen-Freeman, D. E. (1976). An explanation for the morpheme acquisition

- order of second language learners. *Language Learning*, 26(1), 125-134.
- Lee, I. (2013). Development of a Korean child learner's English grammar: Evidence from her narrative description. *Primary English Education*, 19(3), 137-166.
- Lee, I. (2014). A Korean child learner's acquisition of English grammar: A four-year-long case study. *The Linguistic Association of Korea Journal*, 22(1), 69-110.
- Lee, S.-M. (2016). An analysis of errors in acquisition of past tense forms of Korean elementary school children. *Primary English Education*, 22(3), 107-127.
- Leech, G. N. (2004). *Meaning and the English verb*. Edinburgh: Pearson Education.
- Lightbown, P. (1980). The acquisition and use of questions by French L2 learners. In S. Felix (Ed.), *Second language development: Trends and issues* (pp. 151-175). Tuebingen: Gunter Narr.
- Lightbown, P. (1983). Exploring relationships between developmental and instructional sequences in L2 acquisition. In H. Seliger & M. Long (Eds.), *Classroom-oriented research in second language acquisition* (pp. 217-243). Rowley, MA: Newbury House.
- Lim, J.-I. (2005). *An analysis of errors in English language writing by elementary school students in the sixth grade*. Unpublished master's thesis, Daegu National University of Education, Daegu, Korea.
- Liu, M., & Braine, G. (2005). Cohesive features in argumentative writing produced by Chinese undergraduates. *System*, 33(4), 623-636.
- MacWhinney, B., & Snow, C. (1990). The child language data exchange system: An update. *Journal of Child Language*, 17(2), 457-472.
- Makino, T. (1979). English morpheme acquisition order of Japanese secondary school students. *TESOL Quarterly*, 13(3), 428-449.
- McDonald, J. L., & Roussel, C. C. (2010). Past tense grammaticality judgment and production in non-native and stressed native English speakers. *Bilingualism: Language and Cognition*, 13(4), 429-448.
- McEnery, T., McEnery, A., Xiao, R., & Tono, Y. (2006). *Corpus-based language studies: An advanced resource book*. London and New York: Routledge.
- Pancheva, R., & von Stechow, A. (2004). On the present perfect puzzle. In K.

- Meulten & M. Wolf (Eds.), *Proceedings of NELS 34*, 469-484.
- Paradis, J. (2005). Grammatical morphology in children learning English as a second language: Implications of similarities with specific language impairment. *Language, Speech, and Hearing Services in Schools*, 36(3), 172-187.
- Paradis, J. (2008). Tense as a clinical marker in English L2 acquisition with language delay/impairment. In B. Haznedar & E. Gavruseva (Eds.), *Current trends in child second language acquisition: A generative perspective* (pp. 337-356). Philadelphia, PA: John Benjamins Publishing.
- Paradis, J. (2010). Bilingual children's acquisition of English verb morphology: Effects of language exposure, structure complexity, and task type. *Language Learning*, 60(3), 651-680.
- Park, S.-H. (2007). *The effect of direct error correction for the English diary of L2 learner*. Unpublished master's thesis, Korea University, Seoul, Korea.
- Perkins, K., & Freeman, D. L. (1975). The effect of formal language instruction on the order of morpheme acquisition. *Language Learning*, 25(2), 237-243.
- Pica, T. (1983). Adult acquisition of English as a second language under different conditions of exposure. *Language Learning*, 33(4), 465-497.
- Rice, M. L., & Wexler, K. (1996). Toward tense as a clinical marker of specific language impairment in English-speaking children. *Journal of Speech, Language, and Hearing Research*, 39(6), 1239-1257.
- Rice, M., & Wexler, K. (2001). *Rice Wexler test of early grammatical impairment*. San Antonio, Texas: Psychological Corp.
- Rice, M. L., Wexler, K., & Cleave, P. L. (1995). Specific language impairment as a period of extended optional infinitive. *Journal of Speech, Language, and Hearing Research*, 38(4), 850-863.
- Rice, M. L., Wexler, K., & Hershberger, S. (1998). Tense over time: The longitudinal course of tense acquisition in children with specific language impairment. *Journal of Speech, Language, and Hearing Research*, 41(6), 1412-1431.
- Richards, J. (1971). Error analysis and second language strategies. *Language Sciences*, 17, 12-22.
- Sajavaara, K. (1981). Contrastive linguistics past and present and a communicative approach. In J. Fisiak (Ed.), *Contrastive linguistics and the language teacher*

- (pp. 33-56). Oxford: Pergamon Press.
- Sato, C. J. (1984). Phonological processes in second language acquisition: Another look at interlanguage syllable structure. *Language Learning*, 34(4), 43-58.
- Saville-Troike, M. (2012). *Introducing second language acquisition*. Cambridge: Cambridge University Press.
- Schmidt, R. (1983). Interaction, acculturation, and the acquisition of communicative competence: A case study of an adult. In N. Wolfson & E. Judd (Eds.), *Sociolinguistics and language acquisition* (pp. 137-174). Rowley, MA: Newbury House.
- Schwartz, B. D. (2003). Child L2 acquisition: Paving the way. In *Proceedings of the 27th Annual Boston University Conference on Language Development* (Vol. 1, pp. 26-50). Somerville, MA: Cascadilla Press.
- Semren, M. (2017). A longitudinal study of the acquisition of verbal morphology in the EFL classroom. *English Language Overseas Perspectives and Enquiries*, 14(1), 55-74.
- Seo, J.-A. (2003). An analysis of errors in the written English of Korean elementary school students. Unpublished master's thesis, Seoul National University, Seoul, Korea.
- Seo, J.-I. (2014). The impact of cognitive style on errors in English writing through extensive reading: A case study. *English Teaching*, 69(2), 175-198.
- Song, M.-A. (2013). The acquisition and errors of English past tense: A case of three Korean children in Canada. Unpublished master's thesis, Ewha Womans University, Seoul, Korea.
- Sternberger, D. (1982). 'Politics' in language: twelve notes on the history of words and meanings. In M. Cranston & P. Mair (Eds.), *Language and politics/Language et politique* (pp. 25-39). Brussels: Bruylant.
- Taylor, B. P. (1975). The use of overgeneralization and transfer learning strategies by elementary and intermediate students of ESL. *Language learning*, 25(1), 73-107.
- Turner, D. (1978). *The effect of instruction on second language learning and second language acquisition*. Paper presented at 12th annual TESOL convention, Mexico City, April 1978.
- Unsworth, S. (2008). Comparing child L2 development with adult L2

development. In B. Haznedar & E. Gavruseva (Eds.), *Current trends in child second language acquisition: A generative perspective* (pp. 301-346). Philadelphia, PA: John Benjamins Publishing.

Zobl, H., & Liceras, J. (1994). Functional categories and acquisition orders. *Language Learning*, 44(1), 159-180.

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