

INVESTIGATING THE IMPACT OF DERIVATIONAL MORPHOLOGY IN FOREIGN LANGUAGE ACQUISITION: A CASE STUDY

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ABSTRACT

Background and Purpose: Second language (L2) learners have been observed making generation errors, i.e., derivational morphology, in the prospects of learning another language by translating it into their mother tongue. This research has studied these errors in L2 regarding derivational morphology.

Methodology: This study was designed as descriptive research, using a quantitative approach to collect data. The respondents in this research are a total of 100 undergraduates who volunteered to take part, comprising 50 from the second semester, and 50 from the fourth semester who majored in French, and had been chosen using a purposive sampling method. The current study contained an expanded instrument that included each of the four sentences from each of the fourfold or more distractors, comprising 108 items. The affectability of learners to the use of these structures in an unfavourable syntactic situation was tested by crossing derivationally related suffixed shapes with their bases. Data obtained from the 108 item questionnaires was analysed inferentially using ANOVA and t-test.

Findings: Results showed that learners were dissatisfied with the presence or absence of postfixes, implying that generation errors are a problem of performance rather than competence.

Contributions: The current study discovered a gap between the creation of defined and curved structures, confirming phonetic hypotheses that differentiate these two morphological mechanisms. Moreover, this study suggested that the root structures and inferred frames are vulnerable to the area of an incidental postfix and to the nonattendance of a requisite one. Effects are greater at higher levels, suggesting that syntactic knowledge starts to improve in advanced learners.

Keywords: Derivational morphology, language interference, bilingualism, translation, language teaching.

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1.0 INTRODUCTION

Learners of a second language (L2) have been observed making generation errors, such as derivational morphology, as they attempt to acquire the foreign language by translating it into their mother tongue (Lardiere, 2006). In this study, elementary French students made reflection errors in their writings, which were informally composed work projects about current classroom topics. The derivational addition to each word eliminates the ungrammatical argument by evolving the syntactic category of the zero to one inappropriate for its connection; yet the proposed connotation is still strong because of the root of each derivation.

Lardiere (2006) observed comparative prodigies in the composed and spoken production of P, an adult native Mandarin speaker and an English as L2 learner. The issue is directions in bilingualism at the end; ungrammaticalities are created in the sentences by the presence of an incidental derivational addition, but the issue in the following is due to its absence. The derivational relationship between the provided word and the proposed one can be seen as the source of every misstep; it is the too much creation (or undervalued creation) of derivation in morphology that makes the word grammatically inaccurate. In any situation, it is indeed worth noting that the non-beneficial accidental postfixes in P's sample are among the least valuable language-wise, whereas the postfixes of learners studying French are among the most beneficial.

One of the first things that comes to mind when observing to clarify learner-created sentences is that L2 learners almost never mention the location of the incidental postfix. Van Patten (1996) advises learners to focus on the "important" root while ignoring the "less significant" morphological addition. As a result, Jiang (2004) discovered that adult L2 learners

were sensitive to the –s morpheme for plural nouns, implying that morphological information is not coordinated into L2 proficiency. Regardless, these records appear to be optimistic, as they allude to phenomena such as inflectional morphology, though they are unlikely to be extended to derivational morphology.

Since the students in this study are Persian native speakers with a strong command of the English language, learning French as a foreign language may generate language interference (Clahsen & Neubauer, 2010). According to Lardiere (2006), learners have expressed an interest in learning foreign language vocabulary by translating them into their native or second language. The purpose of this study was to investigate derivational morphology interference among these students, and the study objective was to examine the misuse of base and determined structures by observing their recognition of derivationally related structures in grammatically unseemly (improper/inappropriate) relationships.

2.0 LITERATURE REVIEW

The previous studies looking at first and second language learners has come to fundamentally different conclusions on morphological preparation in L2 learners. Various analyses have shown considerable differences in morphological preparation impacts between L1 and L2 speakers.

2.1 Morphological Preparing Impacts

In a group of extraordinarily talented German as L2 students from Poland, Neubauer and Clahsen (2009) identified critical morphological preparation impacts for normal and unpredictable participles of the German language in L1 learners, but just preparing for irregular structures. The researchers hypothesised that L2 preparation could focus less on the morphological creation of an uncertain word and more on the capability and recovery of full word-structure representations in the psychological lexicon. Clahsen and Neubauer (2010) studied a comparative contrast emergence for inferred structures (particularly - employing nominalizations) the next year, with major help impacts in German as a second language. Silva and Clahsen (2008) observed differences in the range of L1 and L2 learners for curved and determined structures in another investigation: For past tense phrasing, L1 learners showed significant morphological preparing effects, whereas English as L2 learners showed no morphological preparing; for nominalizations in adjectival structures, assistance impacts, while reliable in member gatherings, were essentially more grounded in L1 groups than in L2.

Several studies have concluded that L2 preparation is on a very basic level, and not at all comparable to L1 processing. In 2011, Diependaele, Duñabeitia, Morris, and Keuleers (2011) observed veiled preparation impacts for derivationally connected ideal objective matches, such as *watcher – see*, in English L1 speakers and two L2 learner groups (L1s: first was Dutch and second one Spanish). In a study published in 2014 by Dal Maso and Giraudo (2014) on morphological aspects of L2 preparing in Italian, first and second language contrasts emerged noticeably for structures with unique derivational appends; for determined structures with constant and beneficial attaches, L2 learners of Italian demonstrated comparative preparing impacts as L1 speakers. As a result, they claimed that L2 speakers are on a basic level when it comes to morphology data, with L1 and L2 contrasts limited to phenomena that were not fully collected at the time.

In Feldman, Kosti, Basnight-Brown, Filipovi urevi, and Pastizzo's (2010) covered preparing study on the processing of English arched action words, Serbian L2 English speakers also showed a relative preparing impact, with substantial preparing impacts for both conventional and irregular past tense structures in both member groupings. Critical preparation formed uniquely for the high-capable grouping in a subsequent post-hoc study contrasting high-capable and low-capable L2 speakers. As a result, the researchers hypothesised that the differences between L1 and L2 processing could be limited to lower capabilities, with L2 speakers developing similar preparation systems as they become more capable in L2.

Coughlin and Tremblay (2015) discovered a full preparing impact (for example, a comparable measure of preparing for morphologically related practical objective combines with respect to preliminaries where major and minor points were indistinguishable) for English native speakers as students of French in another study exploring the L2 processing of arched French - er action words. So far, the discussion of why these investigations came to different conclusions has mostly focused on operational differences between the investigations or specific settings of the L2 groupings, such as L2 capability, a measure of presentation to the L2, or first language background. However, the studies mentioned differ not only in terms of the exact L2 categories studied, but also in terms of the researched morphological changes, with some focusing on inferred additions and others on curved additions.

2.2 Phonetic Properties

Several phonetic features are shared by inferred and curved forms. In English or German, for example, deduction and articulation frequently include appendage (–er and –ed separately), and in some morphological assumptions, such as Dispersed Morphology (Harley & Noyer, 1999),

the attachment of *stroll* with the addition in derivation— *er* is not regarded differently than the appendage of the inflectional postfix — *ed*. Regardless, the two techniques add unique types of information to the root or stem in terms of morphology.

Induction contains semantic data (*walk-er* = 'a person walks') as well as word categorization changes (V N; V (the) N), whereas articulation adds conceptual syntactic data (such as tense or comprehension; *walk*[present] - *walked*[past]). As a result, the outcomes of determination and affectation differ in that induction produces new lexemes (for example, words with new semantic and syntactic properties), whereas emphasis produces new types of a similar lexeme. However, derivational guidelines plan derivationally connected stem sections onto each other in the dictionary, whereas principles in inflection "place beyond the vocabulary" (Anderson, 1992, p. 184) simply 'explaining' the arrangement of highlights essential by the structural syntax and not including any explanatory material.

The comparison of outputs from inflection and derivation processes is also reproduced in Aronoff's (1994) acknowledgment sets, with initiation done by Clahsen and Felser (2006). The relevant morphological and syntactic characteristics or highlights are found in the previous section, and this section determines the acknowledgment resolution that 'explains' the highlights. The explanation is the curved structure *walked*, for example, if the action word *X* is embedded or the element *Y* is embedded; however, for the standard of derivation, the element *Y* is, as shown in the data, a lexeme that is turned into an item and known as *-er*, for example. Because there is also the decision that having a steady output rather than keeping an element implies inadequate structures.

The processing of decided vs curved structures in local speakers has been investigated in several studies. Some of these studies (e.g., Feldman, 1994; Stanners, Neiser, Hernon, & Hall, 1979) found more grounded preparing impacts for arched structures than for inferred structures. Different studies, on the other hand (for example, Forster & Forster, 2003; see Marslen-Wilson, 2007, for a comprehensive assessment), claim that preparatory impacts for inference and elaboration are equivalent. However, keep in mind that most of them rely on obvious preparation, which is planned to use an advanced, focal lexical phase of processing (Marslen-Wilson, 2007). Moreover, Raveh (2002) directed an investigation that assessed preparing from arched and inferred terms in natives and found equal preparing impacts. Feldman, Barac-Cikoja, and Kostic (2002) found more grounded articulation preparing impacts than initiation in a study on Serbian where highpoints were introduced for slight progress beginning phase shift. They explained this by citing a more grounded semantic connection between highpoints and focuses for curved structures.

In addition to L2 processing, a few studies have investigated formation and articulation. Regardless, these investigations have come to a variety of conclusions. From one perspective, Silva and Clahsen's (2008) study revealed a distinction, with L2 learners (rather than L1 speakers) showing no preparation for curved structures but strong preparation for inferred structures. In a study examining the L2 processing of determined and curved Turkish words, Kırkıcı and Clahsen (2013) discovered differences between L1 speakers and L2 learners only for normal intonation (with critical morphological preparing impacts in Turkish natives, but zero morphological preparing for L2 learners), but not for nominalizations inferred (with noteworthy preparing impacts in member groupings). According to the semantic difference between emphasis and inference outlined in (1) versus (2), the discoveries are reliable (2). This would imply, from a psycholinguistic approach, that derivational and inflectional preparation are dependent on specific sources, like what Crepaldi, Rastle, Coltheart, and Nickels (2010) stated for regular vs occasional inflectional creation. The walk is recognised faster after it has been split into its segment fragments (V + -ed) and then the stem is obtained to and pre-activated during the processing of the major word, which is diagnostic of degeneration. The irregular structure is a subcomponent of the principal lexeme removal, so impacts for uncertain phrasing (for example, fell preceding fall) are due to lexical links. Kırkıcı and Clahsen (2013) argued that L2 learners do not deconstruct morphologically compound vocabs because of this approach.

The lexical linkages between the sequences for determined structures and their roots make it relatively easy to provide impact for inferred (but not curved) structures. In any case, Voga, Anastassiadis-Symeonidis, and Giraudo (2014) have been challenging this record to the test. In a study by Silva and Clahsen (2008) based on comparable experimental items, L2 English (L1: Greek) learners showed significant preparation effects of a comparable size for both inference and production. Following that, Voga et al. (2014) argue against differences in determination and intonation in L2 preparation.

2.3 Inflectional and Derivational Morphology

Inflectional and derivational morphology cannot be regarded to involve the same operations, according to Chomsky (1970). Inflection oversees practical classes like Number and Agreement, whereas determination oversees lexical categories like Noun and Adjective. Even though the presence of functional categories in L2 speakers remains uncertain (Vainikka & Young-Scholten, 1994, 1996; Prévost & White, 2000), the word categories are widely assumed

to be present. In this way, we cannot rely on assumptions drawn from morphological studies in inflection to reflect the issue in discussion.

There is a gap in the domain of research about how to realise derivational morphology. Tyler and Nagy (1989) conducted research on English-speaking children in their first language. Learning derivational morphology has three parts, according to the authors: social learning, which is the ability to recognise how ambiguous words are linked by a common morpheme; learning syntax, which is the recognition that a derivational postfix denotes the word classification in syntax; and distributional information, which is the ability to determine which affix(es) might join to a root.

The last one, which assumes the completion of the first two, follows the three types of information generated in this sequence. The researchers experimented with higher levels and discovered that all groups had some syntax knowledge (albeit the fourth graders performed randomly and based on chance), implying that syntactic information begins to frame precisely about the age of nine.

The researchers also studied whether non-prejudiced or unbiased addition played a role in learning (taking after Aronoff, 1976; Kiparsky, 1982; Lieber, 1980). However, since these types of additions do not go wrong in the consistency with which they investigate syntactic class, it is natural that the experts observed no effect for the objective against subjective qualification on the formation of syntactic learning.

It is also possible that the French, as L2 errors, reproduce social features obtained from derivational morphology while also weakening syntactic learning. Furthermore, if the lack of bias/profitability of a postfix plays no role in syntactic learning, Patty's data is irrelevant when compared to the French as L2 speakers. Lardiere (2006) reproduced Tyler and Nagy's research on P to determine the relationship between her indetermination of a derivational lexical structure and information about the syntactical logical requirements for the frame. P performed sound on the project, revealing that she appears to be aware of the syntactic limitations on inferred frames. The errors in her information processing, then, indicated an issue with the lexical regeneration of the appropriate frame.

2.4 L2 Acquisition

Several studies that investigated L2 derivational morphology proposed that the connective openness of additions in the second language with respect for the first language is a variable that appears to play a role in realisation (Clark, 1995; Lowie, 1998). Lowie (1998) discovered in his PhD publication that postfixes that show semantic and formal closeness among languages

were the easiest to obtain (e.g. – ity[N]/ - ité[N]), followed by postfixes with semantic but no formal correspondence (e.g. –ly[Adv]/ - ment[Adv]), and finally postfixes with formal but not semantic correspondence, i.e. incorrect cognates (e.g. –ment[N]). Interestingly, he also discovered that students made more errors in recognising the syntactic classification of determined words than they did in determining the significance, which corresponds to Tyler and Nagy's (1989) proposed model of the three parts of learning and the types of errors made by the participants in this study.

There appear to be few components to investigate in expressing the morphological overlaps presented by French as a second language speaker. Accepting that they do not consider the postfix is insufficient; the state of their understanding of derivational morphology must be assessed, as well as the simplicity of the addition as for the L1.

Petrush (2008) set out to see if learners had enough derivational morphology knowledge to detect ungrammaticality because of an incorrectly used derivational structure, and if there was a higher tendency to disregard inferred frames in fundamental syntactic situations. The findings suggested that learners' ability to recognise morphological ambiguities, as well as their ability to successfully ignore ungrammatical phrases, improves with competence level.

In general, learners do not appear to give root structures and inferred frames differently in mediating agreement, implying that they are indecisive with the presence of an incidental postfix as well as the absence of a needed one. The effects are increased at higher concentrations, implying that syntactic information begins to strengthen about the sixth semester of the curriculum. Nonetheless, the errors are repeated among sixth-semester students, which may imply an actual issue rather than a processing issue (Petrush, 2008).

Perusing comprehension questions like "In case you know that N+X is synonymous with N, how might you infer 182 N+X?" appear on tests and exams from time to time. Although the purpose of this study is not to perform a systematic evaluation of learner responses to such inquiries, the common conclusion is that they typically fail to notice the relationship between the two lexemes or recognize the syntactic features limited in the addition. Along these lines, the objective of this study is to examine the vicinity of a determined structure in a standard relationship (and the other way around) that concentrates on a grammatically incorrect statement, and to determine what the (in)ability tells us about the state of the students' derivational morphology awareness. We'll look at whether students recognise that derivationally connected structures in connections are grammatically incorrect, as well as whether they're impatient with modifying base and determined structures.

With respect to all the previous studies that have been done regarding derivational morphology in second and foreign language learning, this study found a gap in the related literature that the previous studies have not paid attention to the importance of basic and intermediate learners regarding the impact of derivational morphology as they have a weak command of the pursued foreign language at this stage. Therefore, the impact should be observed and studies concerning its similarities and differences with senior students.

3.0 RESEARCH DESIGN

3.1 Pilot Study

The study was initially led to testing learners' consciousness of linguistically wrong structures including derivational morphology. The errand involved three additions, - ique(Adj), - té(N), what's more, - mentAdv, connected to regularly occurring roots to result 18 additions, along these lines 72 test objects. (See Table 1 for trial words, Table 2 for a sample quadruple.) Generally rooted words that framed derivate excluding phonological transformations have increased the probability that students will learn the words and not ignore authentic statements because of the absence of terminology information, also, the postfixes chosen are exceptionally straightforward as for English, Categories 1 and 2 recognized by Lowie (1998).

Table 1: Root and derived kinds per suffix

-iqueA [N__]		-iteN [A__]		-mentAdv [A__]	
melodie	melodique	Fragile	Fragilite	lent	lentement
ironie	ironique	solide	solidite	honnete	honnêtement
mythe	mythique	rapide	rapidite	difficile	difficilement
energie	energique	simple	simplicite	calme	calmement
economie	economique	timide	timidite	faible	faiblement
allergie	allergique	grave	gravite	facile	facilement

Table 2: Sample quadruple

C'est un prof très énergique en classe.	'He is a very energetic professor in class.'
Ce prof a beaucoup d'énergie en classe.	'This professor has a lot of energy in class'
*C'est un prof très énergie en classe.	'He is a very energy professor in class'
*Ce prof a beaucoup d'énergique en classe.	'This professor has a lot of energetic in class'

To decrease reiteration, the quadruples were part of renditions 1 and 2. There have been likewise 14 distracters, resulting in a sum of 50 objects for each rendition. Members were

requested to study every statement covering a root or inferred structure, next answer the inquiry, "Does this feel plausible to you?". They had to answer with a YES / NO, and on account of a negative answer, they have been requested to highlight the lexeme(s) in the statement had driven them to ignore it. A sum of 100 learners took an interest in this pilot study: 50 from a second semester majored in French, 50 from the fourth semester.

The mean scores were computed regarding expected conduct, i.e., tolerating or dismissing an object for the "correct" aim, the morphological item; accordingly, the perfect mark for linguistic statements has been three and zero for ungrammatical items. Numerous participants ignored objects for an assortment of other (non-morphological) motives, e.g., obscure terminology, sexual orientation, pronouns, spelling. The items meant rather negative for their mean score.

The mean scores are given by level in Table 3. Considering a negative quantity demonstrates how numerous items have been inaccurately recognized; these are improper syntactic connections for the structure if, they should be rejected. Precise recognition and removal could be observed to enhance by level, by the students acting exaggeratedly.

Table 3: Mean raw scores by level

	2nd sem.	4th sem.	Adv.
-ique	2.33	2.50	2.67
base	1.92	2.33	3.00
*-ique	-2.75	-2.50	-0.17
*base	-2.33	-2.17	0
-ite	2.33	2.33	2.83
base	2.42	2.33	3.00
*-ite	-2.25	-1.67	0
*base	-2.00	-2.00	0
-ment	2.25	2.00	2.33
base	1.83	2.33	2.33
*-ment	-2.58	-2.17	-0.17
*base	-2.08	-2.00	-0.17

Since the L2 French data appeared to show a preference for conveying inferred frames in root sets rather than the other way around, the reception of a grammatically incorrect derivate was compared with that of a linguistically incorrect root (Table 4). These defined recognition rates show that determined structures have been recognised slightly more frequently in the improper

connection than standard structures, but there is not enough data in this population to say whether the difference is significant.

Table 4: Recognition of *derived vs. *root

	2nd sem.	4th sem.	Adv.
*derived	2.53	2.11	0.11
*base	2.14	2.06	0.06

Nevertheless, the pilot study indicated that intermediate students had truly high acknowledgment charges for statements about morphological biases. However, as level increased, there appeared to be a pattern of increasing affectivity to these confuses. It suggested that learners are more likely to recognise a predetermined structure in the standard position than the other way around. The results of this study have been encouraging enough to warrant further investigation as an actual study.

3.2 Present Study

The study included an extended tool covering every one of the four statements from each quadruple or more distracters, carrying the aggregate number of objects to 108. The equal test objects of the pilot study have been utilized, some with slight adjustments to maintain a strategic distance from issues that had repeated in the pilot study. Since highlighting mistakes had resulted in being all in or all out as far as responses show, the YES-NO following question was replaced with a recognition size of 1-5, including a "cannot choose" option. Selecting "cannot choose" was proposed to be not quite the same as a 3 on the scale, in that "cannot choose" should demonstrate the absence of adequate vocabulary to settle on a choice regarding the statement, against a reproducing hesitation concerning the grammaticality of the statement. An example is specified in Table 5.

Table 5: Questionnaire item sample

Jean est un prof très énergique en classe.					
‘John is a very energetic professor in class’					
	1	2	3	4	5
This sentence feels	perfectly	acceptable	cannot decide	unacceptable	completely unacceptable

A group of 100 male and female students were selected as respondents from the Department of Languages, Faculty of Humanities, Azad University of Mashhad in Iran. They were selected using a purposive sampling method. Their age ranged between 20 to 35, and all were homogenized in their native, second and foreign language. The mean scores were dissected for every addition, -ique(Adj), -ité(N), and -ment(Adv), in a rehashed trials ANOVA through Procedure and Syntactic setting as inside of participants' components, and with Equal as between participants' component. For the statistical part SPSS was employed. t-test was used for the root versus *root and derived versus *derived analysis. This has been followed by post-hoc matched example t-tests. The mean acknowledgment amounts via level are specified in Tables 6-8 beneath.

4.0 ANALYSIS AND DISCUSSION

The ANOVA for -iqueA revealed remarkably significant relationships of structure with level, syntactic setting by level, then structure by the syntactic relationship. There has been likewise a very significant communication of structure and syntactic setting by level. Regarding the post-hoc study, it is observed to be all together in the 4th semester ($p=.006$). At long last, the matched specimens t-test demonstrated that for the 4th semester, there was remarkably significant for root versus *root ($t(18)=9.948$, $p<.0005$) and Derived versus *Derived ($t(18)=8.741$, $p<.0005$).

Table 6: Mean acceptance rates for -iqueA

6th (N=7)	Mean	StdDev
Base	4.35	.63
Der	4.12	.67
*Base	1.72	.75
*Der	1.83	.72

The ANOVA for -itéN revealed both significant support of structure with syntactic setting and significant cooperation of structure and syntactic setting with level. The post-hoc found sixth-semester students to be altogether unique in relation to each other ($p<.0005$). At last, the combined examples t-test showed differences to be remarkably significant for root versus *root ($t(18)=10.163$, $p<.0005$) and Derived versus *Derived ($t(18)=10.083$, $p<.0005$) for sixth-semester students too.

Table 7: Mean acceptance rates for -itén

4th (N=19)	Mean	StdDev
Base	4.35	.70
Der	3.97	.66
*Base	1.62	.59
*Der	1.75	.75

The ANOVA for - mentAdv revealed a remarkably significant relationship of structure with syntactic setting and additionally a very significant relationship of structure and syntactic setting by level. The post hoc investigation demonstrated just 6th-semester learners were essentially unique in relation to each other ($p=.001$). The matched tests t-test discovered the difference in the 4th grade has been very significant for root versus *root ($t(18)=7.137$, $p<.0005$) and Derived versus *Derived ($t(18)=7.610$, $p<.0005$).

Table 8: Mean acceptance rates for -mentAdv

4th (N=19)	Mean	StdDev
Base	3.96	0.80
Der	3.98	0.70
*Base	1.85	0.74
*Der	1.58	0.74

Overall, frame and syntactic settings are related altogether for every postfix, and learners carry on fundamentally unique differences to each other between sixth-semester learners for every postfix. Except for - mentAdv among the learners, members were just as precise at rejecting base structures in inferred relations (*root) as they have been at rejecting determined structures in root connections (*Derived).

The research planned to observe if students had adequate information about derivational morphology to recognize grammatically incorrect selections because of an improperly utilized derivational structure, and if there has been a more noteworthy tendency to disregard inferred frames in root syntactic settings than improper selections. The outcomes propose that students are undoubtedly fit for distinguishing morphological mistakes. Moreover, their capacity to effectively reject ungrammatical sentences enhances with capability level.

Comprehensively talking, the participants do not seem to offer value to root structures and inferred frames differently in deciding agreeableness, proposing that these are sensitive to the vicinity of an incidental postfix and to the nonattendance of a required one. Impacts are stronger at more elevated amounts, recommending that syntactic information starts to strengthen around the sixth semester of a curriculum. Nonetheless, as noticed at the beginning of this study, generation errors are successive among sixth-semester learners, which might indicate a performance issue as opposed to a processing one.

The present study found an interesting L1/L2 difference for morphological preparing impacts. The L1 group indicated similarly solid support following inferred and curved high points. In the L2 groups, on the other hand, differences between the two types of morphologically connected items emerged, by a vigorous preparing impact for deduction, yet no noteworthy preparing for affectation. For the first language and second language groups, the semantic and orthographic mechanism circumstances did not indicate any noteworthy preparing impacts; concerning this, the preparing impacts in the determined and curved settings have been special to morphologically connected ideal objective sets.

To what extent could the contrast among derivational and inflectional preparing be clarified through non-morphological variables? Some findings (i.e., Diependaele et al., 2011; Feldman et al., 2010; Heyer & Clahsen, 2015) indicated differences in the selection of first language and second language speakers concerning the orthographic aspects among major and minor, with L2ers concentrating generally better on orthographic structure aspects. As morphologically connected ideal objective sets are additionally orthographically connected, the likelihood L2 processing centres generally more around orthographic structure might make L1/L2 differences in preparing impacts. Be that as it may, whereas the orthography aspects in the L2 preparing of complex words surely deserves consideration, It is thought of being difficult to explain the difference between induction and expression in L2 knowledge along these lines.

Initially, our orthographic mechanism circumstance neither demonstrated any orthographic preparing impacts in the L2 gathering nor any huge differences amid the L1 and L2 groups noting the orthographic preparing. Whereas the facts demonstrate that our orthographic and morphological circumstances depend on various elements, a structure-rooted record will consider a significant orthographic preparing impact on the L2 group and L1/L2 differences in the orthographic mechanism context. Second, the level of orthographic aspects (e.g., the number of eruditions shared among major and minor) has been the equivalent for inferred and curved objects. The main difference is that the aspect was generally more word-

related for determined than for curved items. Along these lines, to clarify the difference between inference and expression based on orthography, it will, at any rate, be important to bring the extra inference that L2ers respond differently to word-related aspects.

Finally, the difference among derivational and inflectional preparing did not only occur in our study, yet also in the other two previously mentioned L2 processing findings by Silva and Clahsen (2008) and Kırkıcı and Clahsen (2013) on English language and Turkish language separately. In the studies, determined and curved functional objective sets did not differ. Therefore, structure-based record struggles to explain the difference between determination and expression in these cases.

5.0 CONCLUSION

The present study has revealed a differentiation between the creation of determined and curved structures, therefore supporting phonetic assumptions that recognize these two morphological procedures. Importantly, this differentiation became clear in the L2 knowledge as it were. Accordingly, it is important to investigate morphological creation in various groups and not just in L1 speakers. Furthermore, future study should use methods that appropriately reflect on various etymological discoveries within groups rather than between groups to avoid frustrations caused by low-level differences (i.e., reaction speed) between groups.

REFERENCES

- Anderson, S. R. (1992). *A-Morphous morphology*. Cambridge University Press.
- Aronoff, M. (1994). *Morphology by itself*. MIT Press.
- Aronoff, M. (1976). *Word formation in generative grammar*. MIT Press.
- Chomsky, N. (1970). Remarks on nominalization. In R. Jacobs & P. Rosenbaum (Eds.), *Reading in English transformational grammar* (pp. 184-221). Ginn.
- Clahsen, H., & Felser, C. (2006). Grammatical processing in language learners. *Applied Psycholinguistics*, 27(1), 3–42.
- Clahsen, H., & Neubauer, K. (2010). Morphology, frequency, and the processing of derived words in native and nonnative speakers. *Lingua*, 120(1), 2627–2637.
- Clark, E. V. (1995). *The lexicon in acquisition* (Vol. 65). Cambridge University Press.
- Coughlin, C. E., & Tremblay, A. (2015). Morphological decomposition in native and non-native French speakers. *Bilingualism: Language & Cognition*, 18(1), 524–542.

- Crepaldi, D., Rastle, K., Coltheart, M., & Nickels, L. (2010). 'Fell' primes 'fall', but does 'bell' rime 'ball'? Masked priming with irregularly inflected primes. *Journal of Memory and Language*, 63(1), 83–99.
- Dal Maso, S., & Giraudo, H. (2014). Morphological processing in L2 Italian: Evidence from a masked priming study. *Linguisticae Investigationes*, 37(1), 322–337.
- Diependaele, K., Duñabeitia, J. A., Morris, J., & Keuleers, E. (2011). Fast morphological effects in first and second language word recognition. *Journal of Memory and Language*, 64(1), 344–358.
- Feldman, L. B. (1994). Beyond orthography and phonology: Differences between inflections and derivations. *Journal of Memory and Language*, 33(1), 442–470.
- Feldman, L. B., Barac-Cikoja, D., & Kostic, A. (2002). Semantic aspects in morphological processing: Transparency effects in Serbian. *Memory & Cognition*, 30(1), 629–636.
- Feldman, L. B., Kostić, A., Basnight-Brown, D. M., Filipović Đurđević, D., & Pastizzo, M. J. (2010). Morphological facilitation for regular and irregular verb formations in native and non-native speakers: Little evidence for two distinct mechanisms. *Bilingualism: Language and Cognition*, 13(1), 119–135.
- Forster, K. I., & Forster, J. C. (2003). DMDX: A windows display program with millisecond accuracy. *Behaviour Research Methods Instruments and Computers*, 35(1), 116–124.
- Harley, H., & Noyer, R. (1999). *Distributed morphology*. *Glott International*, 4(4), 3–9.
- Heyer, V., & Clahsen, H. (2015). Late bilinguals see a scan in scanner AND in scandal: Dissecting formal overlap from morphological priming in the processing of derived nouns. *Bilingualism: Language and Cognition*, 18(1), 543–550.
- Jiang, N. (2004). Morphological insensitivity in second language processing. *Applied Psycholinguistics*, 25(4), 603-634
- Kiparsky, P. (1982). *Word-formation and the lexicon*. Mid-America Linguistics Conference.
- Kırkıcı, B., & Clahsen, H. (2013). Inflection and derivation in native and non-native language processing: Masked priming experiments on Turkish. *Bilingualism: Language and Cognition*, 16(1), 776–794.
- Lardiere, D. (2006). Knowledge of derivational morphology in a second language idiolect. *In Proceedings of the 8th Generative Approaches to Second Language Acquisition Conference* (pp. 72-79). Cascadilla Proceedings Project.
- Lieber, R. (1980). *On the organization of the lexicon*. (Unpublished doctoral dissertation). Massachusetts Institute of Technology.

- Lowie, W. M. (1998). *The acquisition of interlanguage morphology: A study into the role of morphology in the L2 learner's mental lexicon*. (Unpublished doctoral dissertation). University of Groningen.
- Marslen-Wilson, W. D. (2007). Morphological processes in language comprehension. In G. Gaskell (Ed.), *The Oxford handbook of psycholinguistics* (pp. 175–193). Oxford University Press.
- Neubauer, K., & Clahsen, H. (2009). Decomposition of inflected words in a second language: An experimental study of German participles. *Studies in Second Language Acquisition*, 31(1), 403–435.
- Petrush, R. A. (2008). Derivational morphology in English French acquisition. In *Proceedings of the 9th Generative Approaches to Second Language Acquisition Conference* (pp. 181-187). Cascadilla Proceedings Project.
- Prévost, P., & White, L. (2000). Missing surface inflection of impairment in second language acquisition? Evidence from tense and agreement. *Second Language Research*, 16(1), 103-133.
- Raveh, M. (2002). The contribution of frequency and semantic similarity to morphological processing. *Brain and Language*, 81(1–3), 312–325.
- Silva, R., & Clahsen, H. (2008). Morphologically complex words in L1 and L2 processing: Evidence from masked priming experiments in English. *Bilingualism: Language and Cognition*, 11(1), 245–260.
- Stanners, R., Neiser, J., Hernon, W., & Hall, R. (1979). Memory representation for morphologically related words. *Journal of Verbal Learning and Verbal Behaviour*, 18(1), 399–412.
- Tyler, A., & Nagy, W. (1989). The acquisition of English derivational morphology. *Journal of Memory and Language*, 28(6), 649-667.
- Vainikka, A., & Young-Scholten, M. (1994). Direct access to X'-theory: Evidence from Korean and Turkish adults learning German. In T. Hoekstra & B. D. Schwartz (Eds.), *Language acquisition studies in generative grammar* (pp. 265-316). John Benjamins.
- Vainikka, A., & Young-Scholten, M. (1996). The early stages of adult L2 syntax: Additional evidence from Romance speakers. *Second Language Research*, 12(1), 140-176.
- Van Patten, Bill. (1996). *Input processing and grammar instruction in second language acquisition*. Ablex Publishing Corp.

Voga, M., Anastasiadis-Symeonidis, A., & Giraudo, H. (2014). Does morphology play a role in L2 processing? Two masked priming experiments with Greek speakers of ESL. *Linguisticae Investigationes*, 37(1), 338–352.