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MORPHOLOGICAL ANALYSIS IN THE SERBIAN EFL LEARNING CONTEXT: INSIGHTS FROM THINK-ALLOUD PROTOCOLS²

Word-building or morphological analysis features prominently in the EFL/ESL teaching literature as an effective vocabulary learning strategy (cf. Gairns & Redman 1986; Nation 2001; Nunan 1995; Oz 2014) which enables learners to decipher the meaning of new lexical items by breaking them down into constituent morphemes. While L1 speakers can rely on this strategy upon encountering unfamiliar words from an early age (Anglin 1993; Clark 2001), the use of word-building in the field of EFL acquisition appears to be an under-researched topic (cf. Ward & Chuenjundaeng 2009; Diaz Contreras 2018). Therefore, the aim of this paper is to contribute to the growing body of literature on the development of morphological awareness in non-native contexts by investigating the way Serbian B2-level learners (CEFR) attempt to figure out the meaning of morphologically complex words, namely derivatives comprising one, two or three derivational affixes. Think-aloud protocols revealed that the upper-intermediate Serbian L1 English L2 learners mostly employed morphological analysis with multimorphemic words (i.e. those containing two or three derivational affixes) while bimorphemic words were often regarded as unanalyzable lexical units. Also, the data collected indicated that the learners rarely drew analogies between unknown words and words of similar morphological structure. The ensuing pedagogical implications and possible teaching interventions will be discussed.

Key words: word-building, morphological awareness, EFL learners, think-aloud protocols, teaching

1. MORPHOLOGICAL AWARENESS IN L1 AND L2 LEARNERS

Besides compounding and conversion, derivation represents one of the three most productive morphological processes in English (Lieber 2009). Although its core vocabulary is Anglo-Saxon, English has over time borrowed a wealth of foreign words, most notably French, Latin, and Greek, which have enriched its derivational system with non-native roots and affixes (cf. van Gelderen 2006). Although the total number of derivational affixes remains a matter of controversy, according to certain conservative estimates there are more than eighty affixes, some more productive

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2 This paper was supported by project grant (contract no. 451-03-47/2023-01/200198) from the Ministry of Science, Technological Development and Innovation of the Republic of Serbia. It is largely based on the data collected for a PhD project in English derivational morphology (Danilović 2013).

than others (cf. Marchand 1969; Stockwell & Minkova 2001; Hay & Bayeen 2002).

The abundance of prefixes and suffixes enables native speakers to form new words (e.g. *rawist*, *Trumpism*, *unfriend*) whose meaning can easily be understood because they contain familiar bases and affixes. Research has shown that native speakers can, from an early age, draw analogies with the existing words (e.g. *elitist*, *Bushism*, *unbreak*) and rely on morphological analysis, i.e. the process of breaking down words into morphemes (e.g. *raw* + *-ist*, *Trump* + *-ism*, *un-* + *friend*), to unlock the meaning of unfamiliar words (cf. Anglin 1993; Nagy, Diakidoy & Anderson 1993). This process is implicitly acquired in L1 children at a very young age - derivational affixes start to be increasingly used in novel formations around the age of three, after established words have been analyzed and some meaning assigned to affixes (Clark 2001). Elementary school children, when asked to define the meaning of unknown derivatives, resort to thinking about the familiar elements contained in them: for instance, when faced with 'priesthood' they will say that they know what a priest is (Anglin 1993: 101). In other words, they possess morphological awareness, that is, the knowledge of the inflectional and derivational forms of base words. As Carlisle (1995: 94) put it, morphological awareness (MA) is "children's conscious awareness of the morphemic structure of words and their ability to reflect on and manipulate the structure". Well-developed MA facilitates the development of reading and writing skills in English L1 children (Kieffer & DiFelice Box 2013; Liu & McBride-Chang 2010; White, Power & White 1989).

Little is known, however, about how morphological awareness affects L2 learning. The few studies that have been conducted suggest that there is a correlation between vocabulary size and mastery of affixes (Mochizuki & Aizawa 2000; Danilović, Dimitrijević Savić & Dimitrijević 2013): the larger a learner's vocabulary is, the better his/her knowledge of prefixes and suffixes. Also, even though there is an abundance of studies pertaining to vocabulary learning strategies that counter in the role of morphological analysis, none of them have to date focused on the way L2 learners attempt to decode the meaning of complex words presented out of context. In other words, to our knowledge, no one has modelled their research on Anglin's (1993) seminal paper. The present paper aims to fill this void by using think-aloud protocols with Serbian upper-intermediate EFL learners.

In the following section we will briefly discuss the nature of the English lexicon and the nexus between vocabulary and derivation before proceeding to discuss the methodological aspects of our research, as well as the results and their pedagogical implications.

2. THE INTERRELATEDNESS OF DERIVATION AND VOCABULARY IN L1 AND L2 ACQUISITION

Etymologically speaking, the very rich English lexicon is multilayered. The most frequent words in English – articles, prepositions, pronouns or conjunctions - are of native origin. So are many other short words that typically denote everyday objects and ideas, e.g. *house, child, water, tree* or *love*. On the other hand, borrowings from Latin tend to be multisyllabic, contain prefixes and/or suffixes, and add varying degrees of formality to the language, e.g. *differentiation, insularity, provincialism*. Many of them are widely used in specialized domains, such as various academic disciplines, as indicated by the Academic Word List (Coxhead 2000) which contains 90% of word families whose origin can be traced to Latin, Greek, or French.

A word family represents an important concept in the studies of lexical acquisition. It refers to “a base word and all its derived and inflected forms” (Bauer & Nation 1993: 253), e.g. *invest, investor, investment, investing, invests*. All the members of a word family are closely related in form and meaning. For this reason, it is commonly assumed that, in theory, knowing a word entails knowledge of its word family members. As O’Dell (1997: 277) put it: “the student who knows the word *translate* can certainly understand, and also probably invent, such words as *mistranslate, re-translate, untranslatable, translator, co-translator, translation, and mistranslation*.” In practice, nevertheless, even native speakers have difficulties in the production of word family members (Schmitt & Zimmerman 2002). Non-native speakers are, naturally, even more likely to face challenges in this respect (Schmitt 1999; Dimitrijević Savić & Danilović 2010; Danilović 2013). Instruction in the formation of derivatives, therefore, seems invaluable in the L2 classrooms. A survey of Finnish L2 textbooks revealed, though, that instruction on derivation was sparse while exercises were plentiful (Myry 2016). This finding supports the thesis held by some authors (e.g. Lopez-Jimenez 2009; Schmitt 1997) that the communicative approach to language teaching has undermined the value of explicit lexical instruction. How do the aforementioned empirical data fit in with strategies and techniques for vocabulary teaching devised by specialists in the field?

With so many morphologically complex words in English, vocabulary learning task facing non-native speakers of English might seem daunting. Not all the words are equally useful, though. Given that approximately 2,000 most frequent words enable a learner to understand at least 80% of the running words in any text, experts nowadays suggest that these words deserve all kinds of attention in the language classroom (cf. Carter 1998; Nation 2005). On the other hand, time and effort should not be wasted on low-frequency words. Instead, learners should be equipped with strategies for coping with them. These include, inter alia, guessing from the context, using a dictionary, or applying the word-part strategy (Nation & Newton

1997). The word-part strategy has also been named ‘word-building’ (Ward & Chuenjundaeng 2009). It entails two steps: (1) breaking down complex words into parts, for which recognition of affixes is a prerequisite, and (2) relating the meaning of the word parts to the meaning of the word, for which knowledge of the meanings of affixes is a prerequisite (Nation 2001: 278).

Bearing in mind that the use of the word-part strategy in EFL learners appears to be an under-researched topic, this paper will explore whether Serbian B2-level learners (CEFR) rely on it when encountering unfamiliar, morphologically complex words. Consequently, the results will indicate whether the word-part strategy deserves a more prominent place in the EFL classroom.

3. METHODOLOGY

3.1. PARTICIPANTS

Six first-year students of the English department at the Faculty of Philology and Arts, University of Kragujevac, voluntarily participated in the study. They had spent at least eight years studying English in a formal learning context prior to enrollment in English language and literature program. Their L1 was, without exception, Serbian while their mean age was 19.02. Although their proficiency level was assessed as B2 by means of an entrance exam that they had all successfully passed, the participants differed with regard to vocabulary size, speaking skill, and morphological awareness, as became evident when the interviews were conducted. Hence, when the transcript of the interviews was being analyzed, we divided the students into two groups depending on their performance: the more (G1) and less morphologically aware group (G2).

3.2. RESEARCH INSTRUMENTS

Think-aloud protocols, also known as verbal reports, are extensively used in the field of second language research when researchers wish to gather information about the way people approach problem-solving activities (Gass & Mackey 2011: 55). In line with Anglin’s (1993) work in the field of L1 acquisition, we decided to test our learners’ ability to decompose unknown words into morphemes by choosing derivatives of varying degrees of structural complexity: six words that contained one derivational affix (e.g. *competitive, suspicious, patriarchic, staggerer, clerkship, hideosity*), six words that contained two derivational affixes (*talkativeness, unbribable, recklessly, explorational, impassibility, abstractionism*) and, finally, six words that contained three derivational affixes (*mischaracterization, intransitivity, encapsulated, strengthlessness, disestablishmentarianism, environmentalist*). Most of these words were borrowed from Anglin (1993). A few were

excerpted randomly, though, from the Merriam-Webster online dictionary (namely, *mischaracterization*, *encapsulated*, *strengthlessness*, *environmentalist*, and *disestablishmentarianism*).

3.3. PROCEDURE

The data was collected during the final few weeks of the first semester so the learners' use of morphological analysis would not be compromised by the course in English morphology which they were to take in the second semester. The author of this paper doubled as the interviewer.

To understand what was expected of them, the participants were first introduced with the purpose of the study and then asked an introductory question whose purpose was to demonstrate what the task was going to be like (i.e. What does the word 'container' mean?). The participants were encouraged to think aloud about each word they heard and share their thoughts about its meaning with the interviewer. They were informed that the words were going to become more and more complex as the interview progressed but at the same time prompted to give as sincere answers as possible. When the participants failed to provide an answer to the question "What does X mean?", they were asked "Can you tell me anything else about the word X?" or "Could you use it in a sentence?". If they still could not guess the meaning of the target word, the interviewer would move on to the next question.

Example: *clerkship*

I: The next word is *clerkship*. What does the word *clerkship* mean?

N5: It's a noun. It has the same ending like relationship. So, well...maybe if...I could say it has to do with maybe a group of people, more than one person. What did you say, again?

I: Clerkship.

N5: Hmm. Clerk. Clerk. Well, aren't clerks people who work in...I don't know... with papers, documents, with administration?

I: Mhm.

N5: So, maybe, it's staff. A group of people doing their job. Maybe.

The conversation was purposely conducted in English for two reasons: (1) because the learners' level of proficiency (B2 CEFR) enabled them to speak, more or less, fluently in English, and (2) so the learners' attention would be focused on English words, and thus implicitly, on their inherent structure. In other words, had the learners been given an opportunity to switch to their L1 (Serbian), they might have resorted to translating the target words which would have, inadvertently, compromised the main purpose of the interviews. The students did, as a matter of fact, try to explain the meaning of certain cognate words by mentioning what they mean in their L1 (e.g. *patriarchic* – *patrijarhalan*), which indicates that they were using a range of strategies in deciphering the meanings of the target words.

The participants' consent to being recorded was acquired beforehand. The digital recordings were later transcribed and meticulously analyzed. All the interviews were conducted in one of the teaching cabinets at the Faculty of Philology and Arts in Kragujevac, outside of regular classes. Each interview lasted approximately 20 minutes.

4. RESULTS AND DISCUSSION

In the beginning stages of the interview, the participants were asked to define the meaning of derivatives with only one derivational affix, i.e. *suspicious*, *competitive*, *patriarchic*, *staggerer*, *hideosity*, and *clerkship*. Having completed the task, they would move on to morphologically more complex words, namely, those with two (*unbribeable*, *recklessly*, *talkativeness*, *magnetization*, *explorational*, *abstractionism*) or three derivational affixes (*mischaracterization*, *strengthlessness*, *environmentalist*, *encapsulated*, *intransitivity*, *disestablishmentarian*). The following procedure was consistently applied: the teacher would read the target word slowly off a piece of paper, repeat it if necessary but would not show it to the students. The students would then attempt to explain the meaning of the word in their own words.

As far as derivatives with a single affix are concerned, if the students knew their meanings, they would share their thoughts with the interviewer straight away, often using target words in illustrative sentences. This pattern was observed with the first target word, *suspicious*, whose meaning was fairly easy for the students to define.

N1: Suspicious. Well, it's someone who...who is not sure in something and has...he has some doubts. For example, you can be suspicious about your husband if he goes out every night.

N2: Suspicious? It should be something...that we don't think is correct and if we say, for example, suspicious person...we think he didn't do something right or correct. We don't trust them.

N3: Hmm...suspicious. OK. Well, to be suspicious of something means... maybe not to be certain about something that we...maybe...suspicious... maybe somebody told us something but we are not certain whether it's true or not and we are suspicious of the fact that we were told.

N4: We use it when we're not sure about something so we have a doubt. We don't trust someone or don't believe them.

For the next target word, *competitive*, the students mostly relied on its morphological relatedness to the verb *compete* or the noun *competition*. They were, obviously, thinking about the familiar word-family members and using a 'part to whole' approach, that is, a single component was first discussed before the meaning of the derivative was arrived at.

N1: Competitive. I can connect it with competition. And it's something...for example, sport competition or...people who try to make themselves better or to win something. So, a person who likes to be a part of competition is competitive.

N2: It means that...we like to compete. It's used for people. People who like to compete, it's like a virtue or something.

N3: It's someone who's willing to...to compete. Who likes to compete. To win, to be the first.

When discussing the next word, *patriarchic*, we noticed that the two students with more advanced morphological knowledge attempted to decode its meaning by taking into consideration the meaning of the base, *patriarch*:

N1: Patriarchic. It had something to do...well, not with father, but maybe it's...I'm not sure how to explain that. Patriarch. It's something that...a man, like, father is more important than women, in a way.

N2: [...] It's related to the head of the family, patriarch.

The next three words, *staggerer*, *hideosity*, and *clerkship*, provide an even clearer insight into the differing approaches taken by the two groups of students: the less competent students mostly claimed that they had never come across the target derivatives or established a mistaken semantic link with other lexemes (e.g. *clerkship* – *ship*, *hideosity* – *idiot*, *hideosity* – *hide*), prompted by phonological associations:

N4: [staggerer] I heard that word before but I am not sure of its meaning.

N5: Staggerer [silently]. I just don't get any ideas. I can't remember, no.

N4: [hideosity] I don't know. I've never heard it. No, really. I have no idea.

N6: [clerkship]...Well, I hear ship so it could be about a ship, maybe some supplies on it.

On the other hand, the students whose morphological awareness was more developed, even when they were not absolutely certain what the target words or their bases meant, showed that they were able to decipher the meaning of constituent morphemes. They did so by drawing analogies with other words that contained these very same morphemes or by decomposing the words into morphemes and then thinking about their meanings and their contribution to the meaning of the target derivative.

N1: Staggerer. It's a person. It sounds like a teacher or singer or...it is a person but I don't know what this person does...stag...stagger. I haven't heard anything similar to it so I cannot relate it to anything. It's a person who staggers, who does something.

N2: Hideosity. Something hideous. Well, it's a noun. I'm not sure what hideous means but it's about that. A thing which is hideous.

N3: Clerkship. It could be something about clerks. Yes. It's maybe some clerk who works somewhere. So, it's...like a state of...clerkship. Of being a clerk.

It is worth pointing out, however, that even these students sometimes found it difficult to break down the target derivatives into morphemes or search for meaningful semantic associations.

N2: [staggerer] Hm...stag....well, I don't know if it's connected but I heard about stag party.

N1: [clerkship] This word is not familiar to me. But...clerk is, like, a noun. I've heard of a name, Clerk, too. A personal name. But not clerkship.

The next segment of the interview featured even more complex words, that is, those containing three morphemes (predominantly suffixes). Once more, as was the case with simpler words, we noted that the students did not hesitate in explaining the meanings of words familiar to them (e.g. *recklessly*, *talkativeness*). Moreover, some students did divide the target derivatives into morphemes, focusing on the bases *reckless* and *talkative* or the root (e.g. *talk*) although they obviously knew what the words meant without the explicit use of this strategy.

N1: Recklessly. It's used for someone...someone who doesn't care too much about something. Like, you do things without taking care.

N3: Recklessly. OK. It's an adverb. I know its adjective is reckless. For example, don't drive recklessly means pay attention when you're driving, do not talk on the phone, do not drink alcohol, do not do something else. Pay attention. Be cautious.

N4: Talkativeness. It's the ability of some person to talk, to chat or...to speak a lot.

N3: [talkativeness] It's someone who is communicative, talks to people. That's the meaning of talkative, the adjective. And talkativeness is being able to communicate, to talk a lot, like it's one of your characteristics. For our job, for example, talkativeness is very important.

When it comes to the adjective *unbriable*, however, we noticed that all the students attempted to perform a morphological analysis, but more or less successfully. The students whose morphological awareness was less developed mentioned the meanings of prefixes, suffixes, and roots, yet could not understand the meaning of the word *bribe*, so they failed to decipher the meaning of the derivative *unbriable*.

N5: I know it's something opposite because of the preposition un-...unbriable...but I don't know what it means.

N6: Hm...it must be something...ability...no ability to do something but...I'm not sure what bribe could mean.

On the other hand, the students whose morphological awareness was more developed either knew what *bribe* and *bribeable* meant and linked the members of this word family with the prefix *un-* that they did not mention explicitly or started the analysis of the meaning of the word from this prefix and ended their explanation by pointing out the meaning of the root.

N1: Well, it's a person who doesn't take bribe, who doesn't take money to do something.

N2: It's when someone is not bribeable, so they don't take money to do or not do something. Politicians or police officers in movies are unbribeable, you can't buy them, they don't take bribes.

Also, we noticed that the students whose morphological awareness was poorly developed exhibited insecurity when performing a morphological analysis and defining the meaning of the derivative *explorational*. This time they mistakenly divided the word into morphemes or explained its meaning although they knew how to use it in an exemplary sentence.

N4: Explorational. It doesn't have something to do with the verb explain, no? I haven't heard that word before. [...] Does it have something to do with rations? No? Explorational. If I could recall what is exploration, I would know.

N5: To explore, to find something and...for example, if we use it in a sentence, we can describe something which can be...found out or which we could explore. Like, this place could be explorational, it could be explored.

In contrast, the students in the more advanced group tried to decode the meaning of *explorational* by focusing on the lexical link between this derivative and its semantic network: first they would mention the meaning of the base *exploration* or the root *explore*; then they would illustrate the use of the word family members by creating sentences or clauses connected with the semantic field of 'travel' (e.g. *explorational journey, trip, voyage*).

N2: It's something about research, exploration. I could go on an explorational voyage, to find new lands, for example. I mean, Columbus went on that kind of voyage, to find new information, new land.

When it comes to the trimorphemic derivative *magnetization*, almost all the students employed the strategy of morphological analysis, establishing links between *magnetization* and the meaning of its root, *magnet*. In addition, the students whose morphological awareness was more developed, brought up the verb *magnetize* and associated *magnetization* with the processes typical of the field of physics.

N1: It probably has something to do with magnets. It's a noun. If it has to do with magnets then it's...to magnetize something is...maybe to...to magnetize a surface or something...means to make it become magnetic. And magnetization is the process of doing that.

The less morphologically advanced group of students attempted to establish some meaningful associations, but with less success, all the while not considering the meaning of the target word in a broader context of its use or register. They explained that they did not know what the meaning of the word was or were unsure about it. We can, therefore, surmise that the unknown lexeme was examined in isolation and not linked with any existing knowledge. A single student did, however, establish a lexical connection between *magnetization* and iron and metals, yet avoided a morphological analysis altogether.

N5: Magnetization. It's something about magnets. Yes. Maybe...magnitude...magnetization. No. I honestly don't know.

N6: I'm not sure but I can try to explain. To guess. Well, I associate it with iron, for example, maybe. Two negative or two opposite sides that are connected...are together. So, it's about that...about metals...connected because of magnetization.

Finally, to decode the meaning of the last trimorphemic word, *abstractionism*, all the students performed a morphological analysis. They mostly concentrated on the meaning of the root *abstract*, establishing a link between the derivative and artistic or literary movements, but not mentioning the suffix *-ism*.

N4: Abstractionism. It is maybe connected with something which is abstract or something which we cannot touch or see. So, abstractionism is maybe something in arts where they draw abstract pictures.

It is worth noting, though, that a single student whose morphological awareness was more developed did approach this task in a different order, thinking first about the final morpheme *-ism*, and then about the root *abstract*.

N2: It could be a movement or something. In literature. Or something like that. I think so because of the *-ism*. We learnt so many *-isms* in literature, for example. And if it's...abstractionism...it maybe means not realistic. It has to do with something abstract.

The final segment of the interview featured the oral presentation of very complex words, consisting of four morphemes. As was the case with other lexemes, regardless of the structural complexity of these derivatives, if the students were familiar with them, they would explain their meaning to the interviewer immediately (e.g. *environmentalist*).

N3: Environmentalist is a...I think it's a person who...has a lot to do with environment. Ecologist, I think. Something similar.

N4: It's a person who is involved with...some...some ecological organizations. It's a person who is trying to save environment, nature.

The students analyzed other lexemes of this sort, for the most part, by identifying the base or the root. When the less advanced group applied the word-building strategy, this occasionally resulted in false reasoning about the meaning of certain morphemes or the inability to draw a conclusion about the meaning of the target derivative based on the meaning of the constituent morphemes. What is more, new word family members were created in this process (e.g. *capsulization*, *capsulated*).

N4: Mischaracterization. Missing of characterization. I can just guess, really. Something miss, something... like... which we don't have.

N5: Strengthlessness. Strength. It seems familiar to me but...strengthlessness. I can't make a guess. Really.

N6: Encapsulated. Hm...first of all, capsulated, I think it has something to do with closed, not open. And encapsulated, that means that...something is, to put it simply, open or not closed. I think so because of capsulization.

N5: Intransitivity. The word transitive is familiar to me so I believe it has something to do with the transitivity...yes, but I cannot quite remember any example or explanation for it.

N4: Disestablishmentarian. It is something that is not established. Establishment...and it means that is not adopted, not...something which is not accepted maybe. But I'm not sure. It's a long word.

If we take into consideration the fact that a student whose morphological awareness was more advanced initially thought that the form *encapsulated* had a negative meaning, it becomes clear that homophonous prefixes, such as *in-* and *en-*, can complexify the comprehension of new words for L2 learners.

N2: Encapsulated. I know it has a negative prefix but it seems to me...I don't know. I would say that it's...it doesn't have a negative meaning, maybe. It looks like something is in the capsule. Something like that. It can be in a capsule, in a way.

From a morphological standpoint, the analysis of very complex lexemes clearly indicated that the advanced students know the meanings of affixes or attempt to draw analogy with other words in order to arrive at the meaning of the target derivatives.

N1: Strengthlessness. It's something without strength. I know that strengthless means not having strength.

N2: Mischaracterization. It's a noun again. And the prefix *mis-* shows us that it's...OK, it's the opposite. I mean, like *miscalculate* or *mislead*. Something that is wrong.

N3: Intransitivity. Well, maybe something about objects. When a verb is transitive it is followed by object. So the opposite is intransitive, when the verb has no object next to it.

N1: Disestablishmentarian. It's related to politics. It's, perhaps, a person who doesn't approve of establishments. I don't really know what establishment means here but I know the negative prefix, *dis-*.

Taking into consideration the aforementioned verbal reports, we can conclude that the students seldom relied on analogy as a possible problem-solving strategy that could have assisted them in deciphering the meaning of the target derivatives. In other words, it seems that, despite having reached the B2 (CEFR) level of English competence, the L2 students are not aware of their knowledge of numerous lexemes whose morphological components are identical. It is precisely this implicit knowledge that could be activated in contact with unknown words. For instance, the lexeme *disestablishmentarian* contains the same suffix *-ian* as do the words *librarian*, *electrician*, *optician*, *musician*, *politician* or *technician*, at least some of which the students must have been introduced to in their English classes. It is worth noting, though, that the phonetic realization of the suffix *-ian* /ɪən/ in *disestablishmentarian* is the same only in the word *librarian*, so this lack of phonetic similarity could have resulted in poor recognition of the link between words containing this element. Anglin (1993) also noticed that native speakers of English rarely relied on analogy as a strategy for deciphering the meaning of unknown words. Those who did employ it were higher grade students. It is possible, therefore, that the level of L2 competence of our students is currently too low for them to be able to observe the similarities between morphological elements and attempt to use this sort of knowledge in order to decode the meaning of unfamiliar words. For this reason, various word comprehension strategies should be developed in students, including the establishment of links between the old and the new knowledge, i.e. the inference of meaning by drawing analogy with words of a similar morphological structure. Such an approach to vocabulary acquisition promotes learner autonomy, enabling learners, in combination with other vocabulary learning strategies (e.g. reliance on the context or morphological analysis), to become more successful at comprehending unknown words (cf. Nation 1990, 2001).

On the other hand, it seems that certain students, predominantly those whose morphological awareness is more developed, have already started applying their knowledge in practical tasks. They are able to identify morphemes in derivatives and to presume, based on the meaning of roots (or bases) and affixes, what the meaning of morphologically complex words is. In relation to this, it is worth noting that all the students made

use of morphological analysis, as a tool for deciphering the meaning of words presented during the interview, but with differing degrees of success and differing consistency. Faced with bimorphemic words, the students whose morphological awareness was underdeveloped rarely attempted to divide these derivatives into morphemes. Even when they did so, they were often moving along the wrong lines, claiming they had never heard of the word constituents, so they failed to see their interrelatedness with either the concepts or words that might have been familiar to them.

The results of our analysis showed that the trimorphemic and quadrimorphemic derivatives presented a challenge for our students who did try to break these words down into constituent morphemes but, given that they lacked explicit derivational knowledge, did not succeed in decoding their meaning. Consequently, if we would like to improve our students' understanding of unfamiliar words, they need to become acquainted with the fact that English contains many derivatives composed of recurring affixes whose meaning can be analyzed by considering the meaning of word family members or other words containing the very same affixes. Also, students should be provided with explicit explanations concerning individual derivational affixes (i.e., their function and meaning), especially the most frequent ones. Moreover, their morphological knowledge could be developed and consolidated by means of various classroom games and activities (cf. Danilović Jeremić 2018).

Students who possessed more advanced morphological knowledge were much more successful at defining the meaning of the target derivatives. They showed that they (mostly) knew what the meanings of roots and bases were. When in doubt, they made use of morphological analysis and relied on their knowledge of lexical categories as well as the meaning of derivational affixes. All of this could imply that the more developed morphological awareness of L2 students is, the better their comprehension of unknown words, which is in line with the results and recommendations of other researchers in the fields of both L1 acquisition (Roberts 1965; Carlisle 1995, 2000; Nunes et al. 2006) and L2 acquisition (Gairns and Redman 1986; Nunan 1995; Nation 1994, 2001).

5. CONCLUSION

The aim of this study was to explore how B2-level (CEFR) Serbian EFL learners decode the meaning of unknown, morphologically complex words. This was achieved by means of a think-aloud protocol conducted in line with Anglin's work (1993) in the field of L1 acquisition. The results have shown that Serbian EFL students use morphological analysis as a tool for deciphering the meaning of unfamiliar words but do not do so consistently. Those students whose morphological awareness was more developed employed this strategy much more frequently than others. Moreover,

they occasionally drew analogies about the meaning of the target derivatives either by relying on their knowledge about the words of similar structure or by connecting the derivatives with other words within the same lexico-semantic field. On the other hand, the students whose morphological awareness could be considered less developed did not depend on these strategies; when faced with trimorphemic or quadrimorphemic derivatives they attempted, for the most part, to analyze their meanings by decomposing the derivatives into their constituent morphemes yet failed to do so successfully because they lacked specific knowledge about the meaning of derivational affixes or roots.

We can conclude that, if our aim is to enable our students to grapple with unknown words, we need to equip them with explicit knowledge relating to the meaning and function of individual derivational affixes. Therefore, in an instructional EFL setting, the word-building strategy should be combined with concrete explanations affix-wise. In doing so, instructors can draw on the Bauer and Nation (1993) seven-band list that groups derivational affixes according to their frequency, productivity, predictability, and various kinds of regularity, with the lower-level affixes being covered before the higher-level ones. Furthermore, the introduction of a whole range of strategies for coping with unfamiliar words (cf. Schmitt 2000) would certainly make it possible for students to approach them from a variety of angles and, consequently, better understand their meaning.

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Jelena R. Danilović Jeremić / MORFOLOŠKA ANALIZA I UČENICI ENGLESKOG JEZIKA KAO STRANOG KOJIMA JE MATERNJI JEZIK SRPSKI: UVIDI NA OSNOVU TEHNIKE GLASNOG RAZMIŠLJANJA

Rezime / Raščlanjivanje reči ili morfološka analiza pominje se u relevantnoj literaturi posvećenoj usvajanju engleskog kao drugog/stranog jezika kao efikasna strategija koja ima značajnu ulogu u učenju vokabulara (v. Gairns & Redman 1986; Nation 2001; Nunan 1995; Oz 2014). Ona omogućava učenicima da otkriju značenje novih reči tako što ih dele na sastavne elemente, tj. prefikse, sufikse i korene. O sposobnosti izvornih

govornika engleskog da koriste ovu strategiju, već od ranog uzrasta, dosta se pisalo (v. Anglin 1993; Clark 2001) dok primeni morfološke analize u oblasti usvajanja engleskog kao stranog jezika nije posvećeno mnogo pažnje (v. Ward & Chuenjundaeng 2009; Diaz Contreras 2018). Sledstveno tome, cilj ovog članka je da doprinese rastućem broju radova koji se bave razvojem svesti o morfološkoj strukturi reči kod neizvornih govornika engleskog time što će istražiti načine na koje učenici engleskog kojima je maternji jezik srpski, sa kompetencijama na nivou B2 (ZEO), pokušavaju da protumače značenje složenih reči (derivata sa jedan, dva ili tri afiksa). Primena tehnike glasnog razmišljanja otkrila je da su ispitanici mahom pribegavali podeli reči na morfeme pri susretu sa višemorfemskim derivatima, tj. onima koji su sadržali dva ili tri derivaciona afiksa. S druge strane, dvomorfemski derivati su često tretirani kao nedeljive leksičke celine. Prikupljeni podaci ukazuju još i da su ispitanici retko primenjivali analogiju kao sredstvo za inferiranje značenja nepoznatih derivata, odnosno nisu pokušavali da se oslone na reči slične morfološke strukture. U skladu sa dobijenim rezultatima prokomentarišaćemo pedagoške implikacije i predložiti vidove nastavnog delovanja koji bi mogli da unaprede pedagošku praksu.

Ključne reči: morfološka analiza, učenici engleskog jezika kao stranog, tehnika glasnog razmišljanja, nastava

Примљен: 10. јануара 2023.

Прихваћен за штампу јуна 2023.