Promoting deep-level processing through etymological elaboration: The case of idioms in Croatian EFL context

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Abstract

Idiomatic expressions have long been named as one of the most notorious language items to be taught to EFL learners, mainly due to their opaque nature that prevents the reader from inferring the meaning. The purpose of this paper is to cast light on the nature of idiom comprehension among Croatian learners of English who are at upper-intermediate and advanced levels. Two groups were included in the research whereas the instrument comprised both pre-taught and novel vocabulary. The experimental group was treated by means of etymological background for each expression which was provided for them during their English course. The control group was instructed to remember as many expressions as they could by means of rote memorization strategies. Both groups were retested after a certain period in order to determine the retention of pre-taught and novel items and see whether the elaboration of etymological background exerted any effect on the retention. The results showed the experimental group outperformed the control participants in recalling pre-taught idioms as well as novel expressions, which goes in favor of etymological elaboration presenting a transferrable learning strategy as opposed to rote memorization.

Keywords: idiom teaching; deep-level processing; etymological elaboration; EFL vocabulary teaching; metaphoric awareness

1. Introduction

Idioms and figurative language in general have been given much attention by cognitive linguists in the last couple of decades, ever since the popular belief that idioms are just an ornament of speech was put aside in favor of new perspectives. In recent years, the conclusions brought forward by cognitive linguistic studies have been implemented in practical language teaching, thus bringing together cognitive and applied linguistics experts in the attempt to facilitate the language learning process in an L2 environment. Teaching learners to speak figuratively in a foreign language benefits them in more ways than one. Littlemore and Low (2006) suggest figurative thought plays a role in all types of communicative competence (i.e., illocutionary, textual, grammatical, strategic, and sociolinguistic), and not just in sociolinguistic competence as proposed by Bachman (1990). To deprive language learners of metaphoric competence is to condemn their discourse to unnaturalness, irrespective of which teaching methodology was employed in the classroom (Danesi, 1995).

Idioms, as one facet of metaphoric thought, have also been subject to a lot of debate in terms of what constitutes an idiomatic expression. For example, *batten down the hatches* (i.e., "to prepare for difficult times"), *pop the question* (i.e., "ask someone's hand in marriage"), and *pass the salt* are all instances of formulaic speech which Wray (2000) identifies as language that is learned and produced as a chunk and not as single constituents. Out of the three examples listed, two would qualify as idioms according to their traditional semantic, syntactic, and sociolinguistic criteria (Fernando, 1978). The idiom's semantic criteria refers to its compositionality, that is, the idiom's meaning is not the sum of the meanings of its individual constituents. From the perspective of syntax, an idiom is a syntactic unit consisting of two or more free morphemes, which is relatively lexically fixed, although one-word idiomatic expressions also exist (e.g., *a lemon* or "unsatisfactory or defective"), but are classified differently depending on the source (see Fernando, 1978; Fink Arsovski, 2002; Langlotz, 2006). According to sociolinguistic criteria, an idiom is defined by its institutionalization, which means the idiomatic meaning of an expression has currency among the speakers of a given community (Fernando, 1978). These are among the basic criteria for establishing idiomatic status, and they vary in degree for each specific expression which, in turn, makes an idiom difficult to define (for example, *pop the question* can be perceived as more compositional than *batten down the hatches* since the idiom indeed refers to a question). This varying degree of an idiom's decomposability, that is, the ability to retrieve the meaning of the phrase by analyzing individual constituents, is also known as *transparency*. *Transparent* idioms are thus seen as highly decomposable (i.e., there is a clear overlap between the literal and

figurative meanings), while less transparent idioms are seen as *opaque* (i.e., there is little or no overlap between the literal and figurative meanings and the figurative meaning cannot be reached through semantic analysis of the phrase's constituents) (Cain, Towse, & Knight, 2009). Boers and Demecheleer (2001, pp. 255-256) list the following factors influencing idiom transparency:

1. *Compositionality.* The more decomposable the idiom is perceived as, the greater its transparency (e.g., *pop the question* is thus more transparent than *kick the bucket*).

2. *Connection to clusters motivated by the same CM.* If an idiom belongs to a cluster or a group of idiomatic expressions motivated by a salient CM (e.g., ANGER IS HEAT in the case of *let off steam, add fuel to the fire*, etc.), it is perceived as more transparent in meaning than an isolated case (e.g., *sell someone down the river*).

3. *Central position within a CM.* Within a cluster of idioms motivated by the same CM, those which are perceived more central, that is, more closely associated with the CM, are usually also perceived as more transparent than the more peripheral idioms (e.g., *She was fuming* is more central to the ANGER IS HEAT metaphor than *He hit the ceiling*).

4. *Etymological origin.* Idioms are higher in transparency if their etymological origin has not become obscure (e.g., *be worth one's salt* originating from ancient Roman times when salt was a valuable commodity and was used to pay soldiers for their services will probably be less transparent to learners than *under one's own steam* which refers to steam energy used on ships and trains).

5. *Culture-specific grounding.* Some idioms are perceived as more imageable and transparent in one culture, and less in another, which is the result of different conventions existing in different cultures.

Etymological origin will be discussed in this paper in terms of motivational mechanisms behind idiomatic expressions, which, among others, also include conceptual structures, also known as *conceptual metaphors*, which lead in popularity in research on idiom motivation.

In recent decades, some of the focus has been shifted from what constitutes an idiom to what motivates idioms and figurative language in general. One of the more widely advocated approaches is conceptual metaphor theory (CMT), proposed by Lakoff and Johnson (1980), according to which figurative language is motivated by conceptual metaphors such as ANGER IS FIRE (e.g., *burst a blood vessel*), ARGUMENT IS WAR (e.g., *cross swords with someone*), or LOVE IS A JOURNEY (e.g., *on the rocks*). However, a significant number of figurative expressions, among which are also some idioms, do not lend themselves so readily

to CMT. Consider, for example, such an expression as *between the devil and the deep blue sea* (i.e., "between two equally unpleasant situations"). Flavell and Flavell (1992) point out all experts agree on the nautical origin of the idiom albeit they differ on the details. The *devil* was either a seam or a plank on a wooden sailing ship positioned in such a place that was hardly reachable, presenting great danger of falling overboard for the sailor who attempted to reach it. Thus, this idiom is not motivated by a conceptual metaphor inasmuch as it is motivated by the culture in which it originated from (in this case, the British maritime).

Culture plays a crucial role in both understanding linguistic expressions and processing knowledge (Dobrovol'skij & Piirainen, 2005). Most of the idioms are retrospectively motivated by underlying structures of knowledge (Piirainen, 2011). Dobrovol'skij and Piirainen (2005, p. 22) distinguish between five types of cultural aspects motivating idioms: *social interaction* (social experiences and behavior), *material culture* (image components which can be ascribed to artifacts from a specific culture), *textual dependence* (originally quotations or allusions), *fictive conceptual domains* (ancient folk stories and pre-scientific conceptualizations of the world), and *cultural symbols* (a piece of cultural knowledge, a semiotic phenomenon). These aspects are likely to differ between cultures, although cross-linguistic differences might not always present a reflection of cultural beliefs. An interesting example is discussed by Deignan (2003) to illustrate how linguistic evidence of use does not always reflect the folk beliefs of a given culture. For example, although both English and Spanish speakers associate dogs with the positive attribute of faithfulness, corpus research showed the lexeme "dog" was used mostly to denote a despised entity (*the car was a dog*). Deignan (2003, p. 259) finds this evidence to suggest "that the existence of different cultural values and attitudes will not always provide an explanation for cross-linguistic differences in metaphorical meanings".

This paper aims to investigate the effects of idiom motivation on comprehension. Boers, Demecheleer and Eyckmans (2004a) recognized the potential benefit of the fact that most idioms are motivated by underlying mechanisms and various cultural aspects. If idioms are indeed motivated and not just arbitrary units of language, then it might be possible "to teach or learn them in an insightful and systematic way" (Boers et al., 2004a, p. 55). In line with this assumption, Boers and associates proposed a strategy called *etymological elaboration* (Boers et al., 2004a; Boers, Demecheleer, & Eyckmans, 2004b; Boers, Eyckmans, & Stengers, 2007). The strategy will be described and an overview of current findings will be provided before the results of our own study are presented and interpreted. Comparisons will be drawn with other studies of the similar scope and relevant conclusions will be offered at the end along with our thoughts on the directions in which further investigations into the matter should be taken.

2. Literature review

Etymological elaboration (EE) is the process of discerning the figurative meaning of an idiom by tracing it back to its origin or source domain (i.e., the context in which it was originally used in a literal sense) (Boers et al., 2004b). EE, as one type of semantic elaboration, is found to be beneficial to learners by providing pathways for comprehension and by enhancing the probability of retention (Boers et al., 2004b). By activating (or reactivating) the literal meaning of an idiomatic expression, learners are given access to an image with the help of which they are also provided an extra means of storing verbal information (Boers et al., 2004a).

Etymological elaboration as a strategy draws on two theories of learning and memory, levels of processing theory (LPT) (Cermak & Craik, 1979; Craik & Lockhart, 1972) and dual coding theory (DCT) (Clark & Paivio, 1991; Paivio, 1978). According to LPT, there is a series of processing stages where "deeper" processes require a greater degree of semantic or cognitive analysis. Deeper levels of analysis are associated with more elaborated and longer lasting memory traces (Craik & Lockhart, 1972). By instructing language learners through EE rather than rote memorization techniques, a deep-level processing is initiated which in turn results in greater retention of instructed vocabulary (Boers et al., 2004a). On the other hand, also the claims of DCT can be used to explain the success of EE in its practical application in many experiments. The multimodality of both verbal and nonverbal input individuals are exposed to allows them to experience their surroundings through dynamic associative processes and plays a role in various educational domains (Clark & Paivio, 1991). According to DCT, both the elaboration of text and the use of concrete examples can evoke visual images, and "this shared imagery mechanism could contribute to the effects on comprehension and memory of both elaboration and examples" (Clark & Paivio, 1991, p. 150). The strategy of *etymological elaboration* draws on this postulate of DCT which states that storing verbal information as a mental image provides learners with an extra pathway for recall (Boers et al., 2004a).

Stemming from the postulates of LPT and DCT theories, EE aims to provide learners with a deep-level approach to learning idioms, which would ensure a dual path of recall by enabling learners to store the expression as both visual and verbal information. For example, *step up to the plate* ("to move into a position where one is ready to do a task") is an idiom derived from the domain of baseball (see Table 1). Traditional teaching methods based on rote memorization include presenting the learners with the idiom's figurative meaning which is then repeated in different types of language exercises in the attempt to achieve long-lasting retention of both the form and the meaning. On the other hand, the EE approach to teaching figurative vocabulary promotes employing

the idiom's literal meaning in vocabulary instruction. In the case of the idiom *step up to the plate*, this approach entails explaining to language learners the origin of the phrase (i.e., the idiom refers to a baseball player building up the courage to step up to the plate when it is his turn to hit the ball).

2.1. EE in vocabulary studies

EE as a strategy for learning idioms was intensively promoted by Boers and associates (Boers et al., 2004a, 2004b; Boers et al., 2007) and their studies into the effectiveness of EE in vocabulary instruction, from our standpoint, constitute an indispensable starting point for any other EE study.

Boers et al. (2004b) employed an identify-the-source task where the experimental group had to choose the correct domain of experience from which a given idiom originated from. On the other hand, the control group was given a comprehension task in which they had to identify the correct meaning of the idiom in question. The tasks were completed through *Idiomteacher* (i.e., an online platform designed by the authors to serve this specific purpose) where the experimental group had five source domains to choose from while the control group had three idiom interpretations at their disposal (Boers et al., 2004b). The results suggest "that despite the 'handicap' of lacking explicit instruction about the idiomatic meaning, experimental students outperformed the control students when it came to (re)producing the expressions in meaningful contexts" (Boers et al., 2004b, p. 384). What is relevant to our current research is the fact that the researchers separated the recall rates for culturally-specific idioms (in our study referred to as CS idioms) which originated from domains more salient in English (participants' L2) than in Flemish Dutch (their L1). By doing so, they identified 34 expressions from various domains such as sailing, baseball, cricket, etc. for which the recall rates were lower in comparison to the overall average results (Boers et al., 2004b).

Another experiment was conducted by the same group of researchers in 2003 to assess whether the strategy of etymological elaboration exerted greater positive effect for certain categories of idioms. The experiment included three tasks: (1) a comprehension task, which served as a pre-test in order to establish which idioms were previously familiar to students; (2) an identify-the-source task with three multiple-choice options to choose from, after which feedback on the idiom's origin appeared on screen; and (3) a gap-fill task (Boers et al., 2004b). The responses included in the analysis came only from those students who provided an incorrect interpretation of the idiom in the comprehension task so as to avoid the interference of prior knowledge with the results. The second identify-the-source task served to discern which idioms were more

opaque from those whose origins were more transparent to the students. However, the results suggest there was no significant difference in the success achieved on the gap-fill task between opaque and transparent idioms (68% and 68.5% respectively) (Boers et al., 2004b).

Etymological elaboration as a strategy has also been tested by other researchers with speakers of different L1 backgrounds. Guo (2008) conducted two post-tests in order to assess idiom comprehension and retention among college-level Chinese EFL learners. The results favored EE over rote memorization as a learning strategy both in comprehension and retention tasks of novel idiomatic expressions. Bagheri and Fazel (2010) applied the instrument used by Boers et al. (2007) (a pen-and-paper test comprising 15 idioms) and administered it to Iranian students of English. They found their results to be a confirmation of the beneficial effect of EE on both meaning comprehension and its retention. Golaghaei and Kakolian (2015) took a step further in their experiment and investigated the effects of three different treatments, namely, visual, etymological, and visual-etymological. They divided Iranian EFL learners into three groups: the first group was taught idiom meanings through pictures depicting the said meaning; the second group was taught idiom meanings through historical elaborations accompanied by some examples and verbal definitions; the third group was exposed to an amalgamation of the previous two procedures where they were given both the pictures and etymological elaborations for the idioms included in the study. The second group, instructed by means of EE, outperformed the first group, taught by means of visual representations of idiomatic meanings. The third group, however, managed to outperform both the visually- and etymologically-instructed groups which suggests "the etymological elaboration can be more practical if it is accompanied by the pictures of idioms" (Golaghaei & Kakolian, 2015, p. 79). Haghshenas and Hashemian (2016) arrived to a similar conclusion in their experiment with young Iranian learners of English as a foreign language. While they did not find a statistically significant difference between the effects of etymological elaboration and pictorial elucidation as idiom learning strategies, they did reveal that the combination of the two strategies led to better understanding of idiomatic meanings.

2.2. Background imagery and novel vocabulary

Part of research into the role of imagery in idiom comprehension also focused on applying EE to acquiring novel vocabulary. Such studies suggest that raising awareness about the underlying images behind idiomatic expressions might result in greater understanding of pre-taught vocabulary as well as novel vocabulary, that is, vocabulary that is not pre-taught to the learners and not part of their

prior knowledge (Beréndi, Csábi, & Kövecses, 2008; Kövecses & Szabcó, 1996). For example, Kövecses and Szabcó's (1996) study focused on exploring the effect of conceptual imagery on phrasal verbs with the adverbial particles *up* and *down*. Their subjects were 30 Hungarian learners of English at an intermediate level who were divided into two groups for experimental purposes. Twenty sentences were taken from dictionaries, where the particles were omitted and the students were required to fill in the missing particle. Out of the 20 phrasal verbs included in the testing, only 10 were previously taught to the participants, albeit in a different manner. The control group was taught the 10 phrasal verbs through memorization, while the experimental group was taught the through conceptual metaphors, according to which the target items were grouped: COMPLETION IS UP, MORE IS UP, etc. (Kövecses & Szabcó, 1996, p. 346). It was expected that the group provided with background imagery would perform better both in the case of pre-taught as well as novel items. The results corroborated this; the experimental group managed to outperform the memorization group both in pre-taught verbs (82% in comparison to 73%) and in novel verbs (77% as opposed to 52% in the memorization group) (Kövecses & Szabcó, 1996, p. 349). Like Boers (2000) in his study, they focused on phrasal verbs but grouped them according to several specific instantiations of orientational metaphors (e.g., COMPLETION IS UP). Still, the results were indicative of background imagery being a helping hand in the process of understanding figurative expressions among EFL learners. What is more, metaphorically aware students were also better equipped to handle novel items in comparison to the control group that underperformed on novel vocabulary.

Another of Boers' (2000) experiments was an attempt to replicate Kövecses and Szabcó's (1996) study into the potential of using cognitive linguistic approaches in EFL classrooms. It included 74 French university-level students, and both the control and the experimental groups were tested for their understanding of phrasal verbs that were previously explained to them in different manners: the control group's input was organized around explanatory notes and the experimental group's input was categorized according to underlying orientational metaphors (e.g., MORE IS UP, ACTIVE IS UP, BAD IS DOWN, etc.). After the notes were removed, both groups were given a gap-fill exercise containing 20 gaps. Half of the missing expressions were the same as those that appeared in the notes given before the experiment; the other half were novel expressions, which were included in order "to investigate the possibility of successful transfer of the strategy of spatial imagery" (Boers, 2000, p. 562). However, although the experimental group outperformed the control group on the ten phrasal verbs that were pre-taught prior to the gap-fill exercise, no difference was reveled for the ten verbs that were not included in the vocabulary notes, suggesting that no strategy transfer took place in the processing of novel expressions.

One of our goals in this study is to explore whether EE can be employed as a learning strategy for novel vocabulary in the same way conceptual metaphors have been in the past. In attempting to do so, we remain aware of some of the drawbacks of EE in vocabulary instruction, most of which are discussed by Boers et al. (2004b). They recognize three different situations in which etymological elaboration might not prove facilitative upon idiom learning. The first of these situations includes low-frequency keywords; if an idiom's component is a word that is not widely used in English or is not commonly taught in EFL contexts, then it might be difficult for the learner to decipher the meaning of the entire phrase (e.g., *be in the doldrums* contains the word *doldrums*, "a region around the equator where there was often no wind to make any progress", which is not just infrequently used, but also rather obsolete in English) (Boers et al., 2004b). The second situation might occur when idiom components represent words that are frequently misinterpreted (e.g., a homograph *chips* in *have had one's chips* or "to lose one's position or place of power"). EFL learners are more likely to associate the meaning of the word *chips* to French fries rather than gambling. The third situation includes mostly culturally-specific idioms where "the idiom may be derived from a source domain that is less salient in the learner's own culture" (Boers et al., 2004b, p. 380). The authors list several idioms as examples, some of which were also the object of investigation in the present research (e.g., *batten down the hatches*). The authors hypothesize that "the idioms derived from less familiar source domains will tend (...) to be less susceptible to dual coding and thus less easily remembered", an assumption that they put to a test in their 2002 and 2003 experiments (Boers et al., 2004b, p. 381). There is also the issue of EE not lending sufficient support to meaning recall, and issue which has been raised by Szczepaniak and Lew (2011) in their study on the facilitative role of pictorial illustrations and etymological notes on short- and long-term retention of idioms. They found that etymology played a negligible role in the recall of idioms' meanings and was "potentially distracting users from the current meaning" (Szczepaniak & Lew, 2011, p. 341). However, they do offer an explanation as to why their results go against earlier findings on EE facilitation (see Boers et al., 2004a; Boers et al., 2008). They ascribe the differences to the nature of the activities in which the subjects engaged and conclude that EE encourages learners to invest a significant amount of cognitive effort whereas in consulting dictionaries a simple etymological note will not invoke deeper processing, as is inherent in the EE strategy used in earlier studies (Szczepaniak & Lew, 2011).

3. The study

The potential benefits of teaching EFL learners the origins of idiomatic expressions was put to the test in a small-scale study using an experimental design. Since

the groups used in the study already existed as such for the purposes of the English language class they had been attending, we cannot claim to strictly abide by the rules of experimental design.

3.1. Participants

Fifteen participants attending a private Croatian school for languages were included in the study upon providing their consent. They had already been attending an English language course at a C2 level and were deemed perfect candidates for the study since the groups were homogeneous in terms of age, gender, and language abilities. Moreover, no estimation of language proficiency was required since the learners had already been tested by the school's administration in order to be assigned to an appropriate class. Advanced learners were chosen because of the nature of the study in question and the vocabulary involved in the lexical make-up of the items included in the instruction and consequent testing. As previously stated, pre-existing groups were used where one was exposed to the experimental and the other to controlled conditions. The control group consisted of 8 participants (age M = 17.12, 4 female and 4 male students) and the experimental group (age M = 17.42; 4 male and 3 female students) was composed of 7 learners in total.

3.2. Materials and method

Both groups were given a pre-test including 34 culturally-specific idioms from the domains of sailing, baseball, and card games. These were identified as highly specific for their cultures of origin and presented a compilation of items included in other studies of the same scope (see Boers, 2001; Boers et al., 2004a; Boers et al., 2008). Since there was no other method available for testing the item's familiarity to the participants, a multiple-choice task was included where the participants were asked to choose the correct definition of the idiom. It served as a pre-test of the students' prior knowledge concerning the idioms included in the study. Based on the data compiled through the pre-test on the sample of 11 students, the 10 items with the lowest scores were chosen for inclusion in further instruction (Table 2). Two items, *step up to the plate* and *be broad in the beam*, both obtained the accuracy rate of 54.54%, but the former was ultimately included in further instruction since the lexical meaning of one of the constituents of *be broad in the beam* (*beam* meaning "the horizontal transverse timber of ship") would perhaps influence the data to be obtained in the post-test (if the item were to be sorted under novel vocabulary, its comprehension would likely be influenced by the learners' unfamiliarity with the said word). A post-test was given to the learners one week after the pre-test and it

contained 10 items from the pre-test appearing in context. A text on effective interpersonal communication retrieved from the *Helpguide.org* website (Robinson, Segal, & Smith, 2016) was adapted for the purposes of the study so it could accommodate all the items included in the testing. A gap-fill task was thus designed to test the learners' productive knowledge of the idioms (see Example 1).

Example 1 Sample context from the gap-fill task in the post-test

Effective communication:
Improving communication skills in your work and personal relationships

It sounds so simple: say what you mean. But all too often, what we try to communicate gets lost in translation despite our best intentions. We say one thing, the other person hears something else, and misunderstandings, frustration, and conflicts ensue. We immediately think things will go from bad to worse so we _____
and prepare a good excuse for leaving the conversation altogether.
          Fortunately, you can learn how to communicate more clearly and effectively. Whether you're trying to improve communication with your spouse, kids, or you are simply trying to _____ with your boss and colleagues regarding this week's meeting, you can improve the communication skills that enable you to effectively connect with others, build trust and respect, and feel heard and understood.

3.3. Instruction

Based on the results of the pre-test, 10 idioms judged as least familiar to the participants were chosen for inclusion in further instruction. Out of the 10 items, 5 were chosen for inclusion in teaching materials and lessons (pre-taught (PT) idioms), and 5 (novel (N) idioms) were not pre-taught to either of the two groups participating in the experiment. These 5 were excluded from instruction in order to test the comprehension of novel vocabulary in the case of learners who had been exposed to etymological elaboration in comparison to those who had not.

The lessons that preceded the testing differed for the two groups; however, both groups received an equal amount of input which differed in content and type of information offered to the learners. Both groups were exposed to four hour-and-a-half lessons which differed in content and teaching methods. The control group was introduced to PT idioms in a traditional manner, typically used for vocabulary instruction; they were first familiarized with the general notion of figurative language and its pervasiveness in everyday speech and afterwards were introduced to the target items, receiving explanations of figurative meanings and dictionary examples of use. They were then encouraged to try and use the items in their own utterances in classroom interaction. The control participants were thus instructed to retain the target meanings through rote

memorization without being given information on the etymological origins of the idioms. In order to ensure the same amount of input, the importance of which was discussed by others (see e.g., Boers, 2000; Vasiljevic, 2011), the control group was given information on pragmatic and syntactic properties of the PT idioms (e.g., idioms with adverbials *step up to the plate* and *be out in left field*; idioms with direct objects such as *touch base* and *batten down the hatches*, etc.).

Table 1 The etymological elaboration of the idioms included in the study

Item	Etymological elaboration	Figurative meaning (source)
PT idioms		
touch base	*Baseball.* Base refers to each of the four points in the angles of the "diamond" in baseball, which a player has to reach in order to score a run.	briefly make or renew contact with someone or something, (Siefring, 2004)
batten down the hatches	*Nautical.* From a nautical expression meaning, literally, to seal the hatches against the arrival of a storm. The word order is fixed.	to prepare for difficult times (Spears, 2006)
back and fill	*Nautical.* Originally nautical, referring to trimming the sails so as to alternately fill them with wind and release the wind, in order to maneuver in a narrow space.	to act indecisively; to change one's direction repeatedly; to reverse one's course (Spears, 2006)
step up to the plate	*Baseball.* [For a batter in baseball] to move near home plate in preparation for striking the ball when it is pitched.	to move into a position where one is ready to do a task (Spears, 2006)
be out in left field	*Baseball.* Literal in reference to a baseball field. The phrase came from baseball terminology referring to the area covered by the left fielder who has the farthest throw to first base.	offbeat; unusual and eccentric (Spears, 2006)
N idioms		
be in the ballpark	*Baseball.* The phrase originated in the USA, where a *ballpark* is a baseball ground.	in a particular area or range (Siefring, 2004)
take the wind out of someone's sails	*Nautical.* To slow down a competing boat by catching the wind in your own sails and preventing it from filling the other boat's sails.	to challenge someone's boasting or arrogance (Spears, 2006)
be off base	*Baseball.* [Of a runner in baseball] not having a foot touching the base.	unrealistic; inexact; wrong (Spears, 2006)
go to bat	*Baseball.* To position yourself to hit the ball in a baseball game.	to support or help someone (Spears, 2006)
come up trumps	*Cards and gambling.* A trump is a valuable card to hold. The allusion in this expression is to someone with a mediocre hand unexpectedly turning up a trump card and finding his bad luck suddenly reversed.	unexpectedly to produce just what is needed at the last moment (Flavell & Flavell, 2006)

The participants' responses were categorized as either *correct* or *incorrect*, depending on whether the complete idiomatic expression with corresponding nominal constituents was offered when completing the task at hand. Allowances were made for spelling and article omittance (for example, response *be in ballpark* was categorized as a correct instantiation of the targeted idiom

be in the ballpark since it is the author's belief that it does not impede the understanding of the phrase within desired context). On the other hand, the participants were required to produce grammatically well-formed idioms in order to fit the text gap. For example, *be off base was categorized as an incorrect response within the following sentential context: "(...) without the risk of *be off base* and seeming as you don't really understand what is being discussed". Such decision was made since a grammatical error of such scope impedes reading and overall comprehension of the idiom as well as the complete text.

Instruction in the experimental group was based on etymological elaboration. They were also familiarized with the general notion of figurative language and its pervasiveness in everyday speech. In addition, they were explained the underlying motivation behind many of the everyday expressions we use. The learners were encouraged to think of culturally-specific idioms in Croatian and were invited to hypothesize about the origin of PT idioms written on the whiteboard. They were then presented with the short explanations of the idioms' origins (Table 1). The same classroom activities were used as in the case of the control group (independent use in context, classroom discussion, etc.).

Table 2 Scores for items (*N* = 34) included in the pre-test (obtained on the sample of 11 participants)

Item	Correct responses (%)		Item
sail under false colors	100.00	72.72	throw a curve ball
be between the devil and the deep blue sea	100.00	72.72	be on the rocks
whole new ball game	100.00	72.72	keep on an even keel
put your cards on the table	100.00	72.72	load the dice
right off the bat	100.00	63.63	run a tight ship
be in the doldrums	90.90	63.63	be three sheets to the wind
call someone's bluff	90.90	54.54	be broad in the beam
give someone a wide berth	90.90	54.54	step up to the plate
be on your beam ends	90.90	45.45	be out in left field
hit someone for six	90.90	45.45	touch base
have an ace up your sleeve	90.90	45.45	back and fill
sweeten the pot	81.81	45.45	come up trumps
hit a home run	81.81	45.45	batten down the hatches
raise the ante	81.81	45.45	take the wind out of someone's sails
take someone down a peg or two	81.81	36.36	be in the ballpark
go for broke	81.81	36.36	be off base
make the leeway	72.72	18.18	go to bat

Ethical considerations were taken into account in this experiment. Upon the conclusion of the experimental phase, the control participants were also introduced to etymological elaboration as a strategy of learning idiomatic expressions. Both PT and N idioms were revisited with both groups in order to consolidate the retention of vocabulary used in the study.

4. Results

The data obtained in this study were tested against two null hypotheses:

$1H_0$: No difference in means will be observed between the Control and the Experimental group since etymological elaboration does not facilitate retention of idiom meaning.

$2H_0$: No difference will be observed between means obtained for Pre-taught (PT) idioms and Novel (N) idioms. Etymological elaboration does not induce metaphoric awareness which facilitates comprehension of novel vocabulary.

An independent *t*-test was conducted to compare idiom comprehension in EE and no EE conditions. There was a significant difference in the scores for control (*M* = .55, *SD* = .18) and experimental (*M* = 1.30, *SD* = .43) group; $t(8)$ = 2.30, *p* = .002. $1H_0$ is therefore discarded since the results indicate the experimental group which was instructed using the EE method performed generally better on the post-test in comparison to the control group that was denied the EE instruction (see Table 3).

Table 3 Summary statistics for the groups included in the study

	M	*SD*	*SE*		*Kurtosis*
Control (N = 8)				Statistics	Standard Error
PT idioms	.72	.42	.15	1.67	1.48
N idioms	.37	.16	.05	-1.39	1.48
Total	.55	.18	.06	.91	1.48
Experimental (N=7)					
PT idioms	1.51	.53	.20	-1.62	1.58
N idioms	1.08	.42	.16	3.41	1.58
Total	1.30	.43	.16	.70	1.58

Two independent *t*-tests were conducted to compare comprehension of PT and N idioms by the two groups involved in the experiment. In the case of pre-taught vocabulary, a significant difference was observed between the control (*M* = .72, *SD* = .42) and experimental (*M* = 1.51, *SD* = .53) group; $t(11)$ = 2.20, *p* = .009. The same was observed for novel vocabulary where the difference between the control (*M* = .37, *SD* = .16) and experimental group (*M* = 1.08, *SD* = .42) was again found to be statistically significant; $t(8)$ = 2.30, *p* = .003.

Table 4 Items included in the post-test with corresponding means

Items	Control	Experimental	Total
PT idioms			
touch base	1.63	2.00	1.79
batten down the hatches	.63	1.43	.98
back and fill	.63	1.43	.98
step up to the plate	.25	1.71	.89
be out in left field	.50	1.00	.72
N idioms			
be in the ballpark	.63	1.14	.85
take the wind out of someone's sails	.63	.86	.73
be off base	.38	1.14	.71
go to bat	.25	1.14	.64
come up trumps	.00	1.14	.50

5. Discussion

The results obtained in this study corroborate the facilitative role of the EE strategy not only in retention of idiom meaning, but also in learning novel vocabulary. The experimental group scored higher on pre-taught vocabulary than the control group, which can be attributed to their knowledge of the etymology behind the idiomatic expressions taught. EE provided the students in the experimental group with an additional way of storing information about the idiom meaning. Unlike the students in the control group who only had verbal information about taught idioms to rely on, the experimental group students were provided with non-verbal information about idioms via etymological notes, which arguably invoked mental imagery of the idioms included in the pre-teaching phase of instruction. EE may have allowed deeper processing of pre-taught idioms with the experimental group and made possible for the idiom meaning to be stored both verbally and non-verbally. Such conclusions seem to conform to the claims of both the levels of processing theory (Craik & Lockhart, 1972) and dual coding theory (Paivio, 1978), which propose that storing information about words both verbally and non-verbally has a favorable effect on their comprehension and retention.

Furthermore, our findings suggest that etymological notes can be helpful even in the case of idioms whose source domains are less salient in learners' L1. As previously mentioned, both groups were given a pre-test including 34 culturally-specific idioms from the domains of sailing, baseball, and card games which were identified as highly specific for their cultures of origin and represented a compilation of items included in other studies of the same scope (see Boers, 2001; Boers et al., 2004a; Boers et al., 2008). The three domains are all more salient in American and British English than they are in the Croatian language.

However, there are subtle differences between the three domains' presence in Croatian. While there are no baseball idioms in Croatian, which is understandable since the sport has not been introduced into the country or the Balkans in general, nautical and card idioms are very much present in the language. However, card games as and idioms' source domain is far less productive in Croatian than the maritime domain, which has yielded numerous expressions connected to the nautical experience of the country, which has been historically bound to its shore and the Adriatic Sea. The means obtained for each of the 10 items included in the study (Table 4) show that among the PT idioms the two idioms which scored the lowest were from the baseball domain (i.e., *step up to the plate* – *M* = .89 and *be out in left field* – *M* = .72). Nevertheless, the experimental group outperformed the control group even in the case of baseball idioms whose domain is apparently the least salient among Croatian learners of English (1.71 and 1.00 means respectively). We may, therefore, question suggestions made in earlier studies which would have us believe idioms stemming for less salient domains in learners' L1 are also less susceptible to the mnemonic technique of dual coding (Boers et al., 2004b). EE as a learning strategy proved equally effective across the three domains and no significant differences were found between the three sets of idiomatic expressions. No explicit instruction or guidance was given in the case of PT baseball idioms and it is our belief EE is equally applicable as a learning strategy to expressions from less salient cultural domains. Short etymological elaborations seemed sufficient to trigger dual coding among the experimental participants, which seems to contradict the arguments set forth by Szczepaniak and Lew (2011). In our study the participants were encouraged to hypothesize about the origins of PT idioms written on the whiteboard before being presented with short explanations of the idioms' origins. Such an approach requires considerable cognitive effort in intensive processing of imagery before the learners are even presented with the etymology of the idioms and it might be the reason why EE proved facilitative in our study and not in Szczepaniak and Lew's (2011) research where etymological notes in dictionary consultations were not processed with comparable depth.

Etymological elaboration also proved facilitative in learning novel vocabulary. Our results are comparable to those obtained in earlier studies (e.g., Boers et al., 2004a; Boers et al., 2007; Guo, 2008). The experimental group (*M* = 1.08) outperformed the control group (*M* = .37), which suggests that EE exerted a positive impact on the learners' comprehension of novel vocabulary. Boers et al. (2004b) argue that, by explaining the etymological origin of the expression's literal meaning and by encouraging learners to independently attempt to discern the meaning behind the expression, we are inevitably improving the retention of figurative language by means of promoting general metaphoric awareness.

Promoting general awareness of motivational mechanisms behind figurative language yields a more competent language user since figurative thought plays a role in all types of communicative competence (Littlemore & Low, 2006).

6. Conclusion

Further studies should aim to include more participants and see whether noticeable differences would be observed in relation to the participants' cognitive learning styles, that is, where they would fall within the verbalizer/imager continuum. Etymological elaboration as a strategy should also be investigated further in combination with pictorial elucidations in order to determine whether it would exert an even more positive effect on vocabulary acquisition. Nevertheless, research into etymological elaboration has produced enough evidence for this strategy to be considered as one of the indispensable classroom tools when it comes to language instruction. Its beneficial effects on vocabulary comprehension and retention have been extensively corroborated in various studies. The use of EE most certainly offers EFL teachers an additional method of introducing novel vocabulary by both engaging learners through etymological elaborations of meaning and raising their general awareness of underlying motivational mechanisms in language. EE can also be used to introduce learners to cultural knowledge behind the language they are trying to learn, and by doing so, raising their general appreciation for the target language as well as its culture.

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