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Textual and pictorial representations in strategic thinking about linguistic meaning

The aim of this study was to investigate L2 speakers' ability to think strategically about linguistic meaning by asking them to make sense of particle verb (PV) constructions, a particularly demanding aspect of the English language for L2 speakers. Our focus was on meaning construal strategies in textual and pictorial representations of 22 figurative PVs with the particle *down*. The participants were asked to express themselves verbally and visually, and we were interested in the nature of their answers as well as their relationship. More specifically, we wished to determine the salience of particular elements in the participants' strategic meaning construal, the type of relationship between textual and pictorial representations and, finally, potential dominance of one mode over another, which was examined in terms of the well-established concepts of "relay" and "anchorage". The results showed that participants generally related the meaning of the PV construction to its components in their textual answers, whereas in pictorial answers their main tendency was to attend to the figurative meaning of the PV. Furthermore, their textual and pictorial answers most frequently depended on each other, which allowed us to determine that the text-picture relationship was predominantly that of relay, i.e. that text was perceived as more significant in the text-picture relationship.

Key words: English particle verbs; strategic construal; textual representation; pictorial representation; relay; anchorage.

1. Introduction

Although ideas about learning as a process involving endless repetitions, lists of rules, and rote learning as its central activities have been frowned upon and criticized



for decades, the reality is that all teachers, including foreign language (FL) teachers, still insist on the fact that there are certain things that simply need to be learned by heart. When it comes to EFL (English as a foreign language) teachers, this insistence is easily observable in the activities pertaining to teaching idiomatic constructions such as idioms or particle verbs (PVs). Such an approach to teaching language is largely anchored in the idea that language categories are clear-cut rather than discrete and that linguistic meanings tend to be arbitrary rather than conceptually motivated. However, these ideas have been disputed. Cognitive linguists in particular suggest that the relationship between the meaning of a figurative expression and its form is not arbitrary and stress the importance of investigating meaning as a dynamic and subjective phenomenon. In fact, various studies pertaining to second language (L2) meaning construal have already provided ample evidence that speakers of English have the ability to meaningfully decompose and analyse linguistic constructions such as idioms and PVs (e.g. Boers & Demecheleer 1998; Geld 2009a; Yasuda 2010; Geld & Letica Krevelj 2011; Geld & Stanojević 2016). In the case of English PVs, it has been found that L2 speakers of English strategically construct their meaning by attending to both components in their composite wholes (Geld 2009a; Geld 2011; Geld & Maldonado 2011). They find them both meaningful even in the cases when they are quite schematic and not too informative in terms of semantic contribution.

In this study, we wished to take this idea a step further and investigate speakers' visual representation of meaning, that is attend to both their verbal and pictorial construal of meaning. The idea stems from the self-evident role of visual input in both incidental and intentional language learning as well as the omnipresence of multimodal information that all of us process daily. In order to tackle the question of this bimodal representation of meaning, we used part of Geld's data set (2009b) collected by obtaining answers from L2 speakers of English with Croatian or Spanish as their L1. They were asked to make sense of idiomatic meanings of a number of English PVs by providing both textual answers and drawings. We conducted a qualitative analysis of the answers obtained from ten most proficient learners with Croatian¹ as their L1. More specifically, we analysed their bimodal answers provided for PV constructions with *down* by attending to the nature of their answers and the relationships between the two modes of representation.

¹ We decided to focus on a selected set of data in order to be able to conduct a qualitative analysis on a relatively homogenous set of answers and avoid differences pertaining to L1 as well as those related to the nature of different topological components (*in*, *out*, *up*, and *down*) in the PV constructions used in the original instrument designed by Geld to collect a much larger data set (2009b).



2. Strategic construal

In describing the concept of construal, Langacker (2008) points out that language reflects our capacity to interpret all situations according to what we find salient, i.e. we attend to specific aspects of the referent scene depending on the meaning we construct and wish to convey. In other words, our linguistic choices, that is, linguistic units that range from the fully specific to maximally schematic, depend on our conceptualization of the situation in question. While Langacker's construal refers to the processes taking place in our first language, the concept of strategic construal pertains to the process of meaning construal in L2. When L2 speakers are constructing meaning, they activate various cognitive processes that communicate with language, along with their knowledge of the world, and the knowledge of their L1. In our use of the concept of strategic construal and the theoretical framework it implies, we assume that L2 speakers are capable of constructing meaning and, therefore, paying attention to both form and meaning (Geld 2009a). Accordingly, if they are able to relate specific forms to specific meanings, they will also be able to make sense of idiomatic expressions and identify cognitive motivation behind their components. Naturally, what it is that particular speakers find salient in L2 depends on a number of language-internal and language-external factors. One of the language-external factors is their proficiency in L2 (Geld 2009a; Geld & Letica Krevelj 2011). Previous research on strategic construal has shown that more proficient speakers of English as L2 are more likely to observe a connection between form and meaning. Another important factor is their L1 and its typological characteristics. For example, Croatian speakers of English tend to find particles semantically informative due to Croatian verbal prefixation that codes similar meanings as English particles in PV constructions (Geld 2009a; Geld & Letica Krevelj 2011). Furthermore, strategic meaning construal of PVs is determined by the nature of their components (particles and verbs). For example, some particles seem to be more salient and thus more informative than others – *down* has been found to be more informative than *up* (Geld & Letica Krevelj 2011; Geld & Stanojević 2016) and *out* more informative than *in* (Geld 2009a). Likewise, certain lexical components of the PVs are semantically heavier or more concrete (e.g. *break* or *draw*) whereas some others are semantically lighter or schematic (e.g. *put* or *take*). In this study we focused on the interplay between textual and pictorial representation of meaning by taking a closer look at the PV constructions with *down* – the particle that had been previously found very informative for L2 learners of English. However, as already mentioned, this time the participants' strategic construal was examined from a multimodal perspective, which is crucial due to two interrelated reasons: 1) our experience is multimodal and language is an experiential phenomenon, and 2) pictorial



representation of meaning has been largely neglected in L2 research despite the fact that EFL/ESL (English as a second language) teaching material is abundant in visual information of different form and origin.

3. Imagery and (visual) metaphor and grammar

Since our study is situated within the theoretical framework of cognitive linguistics, we shall briefly discuss two cognitive-linguistic concepts relevant for our work: mental imagery² and conceptual metaphors. The notion of conceptual metaphors was introduced by Lakoff & Johnson (1980: 6–7), who saw metaphors as an integral part of humans' conceptual system, which is then reflected in language. For example, spatial meanings of *up* and *down* in PV constructions are extended to figurative ones based on the conceptual mapping present in the metaphor GOOD IS UP and BAD IS DOWN (e.g. I can't believe Luca *broke down* after he got an F on the exam). The cognitive motivation present in such meaning extensions prompted researchers to examine the potential of employing conceptual metaphors in the area of teaching English as a foreign language (TEFL). For example, Boers & Demecheleer (1989) and Yasuda (2010) demonstrated that drawing the L2 speakers' attention to conceptual metaphors could be very useful for EFL learners.

Similarly, imagery in general tends to be discussed as an important facilitator in the process of teaching and learning foreign languages. Kurtyka (2001) proposes that PVs would be easier to retain if they were accompanied by relevant visual representations that would facilitate learners' visualisation. However, the role of imagery has been primarily researched in relation to idioms. For example, the results of the study by Gibbs & O'Brien (1990) suggest that speakers visualise the figurative meanings of idioms and that these visualisations are dependent on conceptual metaphors. Accordingly, the conclusion was that this could be used in the process of teaching – by making learners aware of conceptual metaphors or by encouraging visualisation, for instance. However, a consensus has not been reached on the usefulness of imagery in idiom retention. For example, authors such as Cacciari & Glucksberg (1995) claim that speakers generally visualise the literal meanings of idioms, which somewhat contradicts the assumption that idiom visualisation might be useful for learning and teaching idioms since recognizing their literal meaning is

² Mental imagery is certainly not an exclusively cognitive-linguistic concept. It is largely inter-/multi-disciplinary and tends to be discussed from various perspectives. The point we are stressing here is that the concept in question is central to the theoretical framework of cognitive linguistics. In fact, cognitive linguists equate imagery with linguistic meaning.

only one of the steps in the process of meaningful construction of their meaning. Finally, researchers such as Janyan & Andonova (2000) and Nippold & Duthie (2003) suggest that visualisation (i.e. constructing mental imagery) can be useful in processing idioms. Imagery is generally regarded as an important facilitator in processing and retention of information that needs to be learned. Levin's (1983: 232) overview of studies on the topic of pictorial representations and learning provides various examples of illustrations facilitating learning, but emphasises that they are not useful in all contexts and for all learners. Carney & Levin (2002: 21) single out the so called transformational illustrations (cf. Figure 1) as the best facilitators of retention when learners need to understand and learn something more complex. They include mnemonic (memory enhancing) components and aimed at improving a reader's recall of text information (Carney & Levin 2002: 7). However, transformational images are quite scarce in most teaching materials examined and this seems to be the case with EFL textbooks too.

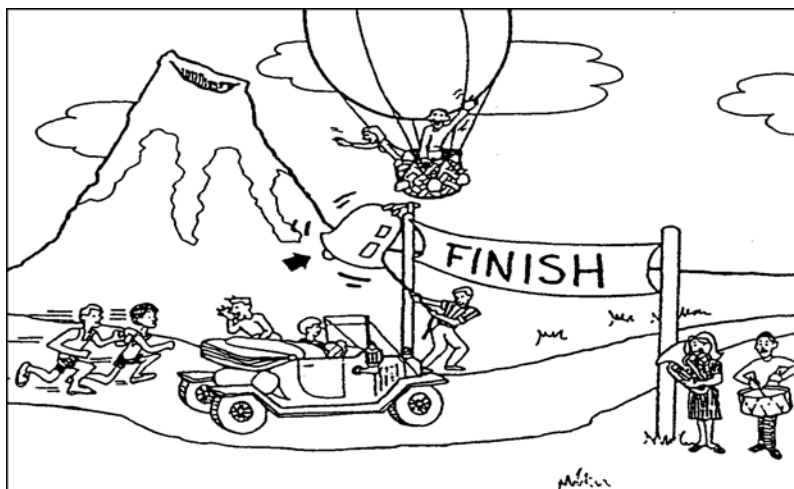


Figure 1. Transformational illustration designed to represent details about the fictitious city of Belleview (taken from Dretzke 1993: 494, as cited in Carney & Levin 2002: 18)

For example, Romney (2012) analysed the most popular EFL textbooks in Japan, and found that they did not include any transformational images. Furthermore, Basal *et al.* (2016) analysed Turkish EFL textbooks, and found some transformational images but they were considerably outnumbered by representational and decorative images. Similarly, Rosso's analysis (2017) of two EFL textbooks that are commonly used in Croatian high schools showed that transformational images are



rarely incorporated in textbooks, which brings us to the conclusion that EFL textbooks seem to show a serious lack of images that are likely to facilitate retention of information and learning. Still, the question remains whether learners, irrespective of the ways they are customarily taught, manage to develop meaning construal strategies that include imagery that goes beyond purely decorative or representational elements that tend to constitute EFL textbook illustrations. This study addresses this question.

In the context of EFL, PV constructions are undoubtedly one of the greatest challenges for both learners and teachers (cf. e.g. Celce-Murcia & Larsen-Freeman 1999; Kurtyka 2001; Rudzka-Ostyn 2003, etc.). The challenge of providing meaningful explanation for multiple senses of English PVs has been the focus of several studies we have already mentioned (cf. e.g. Geld 2009a; Geld & Letica Krevelj 2011; Geld & Stanojević 2016). However, the data set used in the studies in question consisted of the participants' verbal answers. Relying on the obtained results from the above studies and the theoretical framework employed, we redirected our focus to the visual mode of representation, or, more precisely, to the bimodal representation of meaning. Our central aim became the nature of pictorial representation of meaning and its relation to the textual explanations provided by the participants.

In her analysis of visual metaphors and their use in political cartoons, El Refaie (2003: 90–91) observes that there is a tendency to treat visual metaphors as if they were verbal metaphors, even though there are certain limitations that the visual mode imposes on metaphoric expression. For example, the visual mode makes it difficult to represent certain elements explicitly, such as abstract entities. This somewhat restrictive nature of the visual mode is also discussed by Geld & Stanojević (2018:137), who state that in order to represent schematic concepts visually, it is necessary to make them more specific, i.e. less abstract. Accordingly, El Refaie stresses that description of abstract entities visually is entirely impossible without employment of metaphor. Furthermore, visual metaphors depend on analogies and symbols in order to represent abstract entities, which makes them more implicit and more context-dependent. This also means that it is more difficult to establish whether certain elements of the image are literal or metaphoric. The above stated comparison implies that we cannot analyse texts and images coding figurative meanings in the same manner. Even though the visual mode is more arduous to analyse due to the difficulty of distinguishing between the literal and the figurative as well as other particularities, there are certain aspects in pictorial representations that are easier to observe, such as those shared by societies and cultures. Forceville (2008: 477) also acknowledges this advantage of the visual mode in his discussion on non-verbal metaphors, and explains that non-verbal metaphors, such as visual



metaphors, are more likely to transcend cultures. As we can discuss the English grammar or the Croatian grammar, so we can discuss visual grammar (Kress & Leeuwen 2006). Without it, *Pictionary* would never have become an internationally popular game just as our attempt to analyse drawings in this study would have been doomed from the start. Kress & Leeuwen (2006: 3) suggest that visual grammar is culturally specific and reflects the shared knowledge of certain Western cultures and societies. Their analysis of visual grammar is tied to Western culture, which is not surprising considering that their work is based on the characteristics of visual design in specifically Western cultures. In their analysis of pictorial representations of meaning of PVs, Geld & Stanojević (2018) acknowledged the fact that visual representations tend to be culturally specific, but their data show that there are visual representations that transcend cultures. They attribute some of them to the shared human experience, an example of which would be representations coding conceptual metaphors such as UP IS GOOD or DOWN IS BAD, which are based on our shared spatial experience and the systemic correlations between this experience and more abstract ones. The authors also suggest that some visual representations may have become shared due to globalization.

4. Text–picture relationship

As previously mentioned, part of our study was concerned with the relationship between textual and pictorial representations of meaning. In *The Rhetoric of the Image* (1964: 40–41), Barthes focuses on the text-picture relationship in advertisements and introduces two types of the relationship in question – anchorage and relay. In the case of anchorage, the image has numerous possible interpretations and the text is used as an anchor to identify the intended meaning. Barthes finds this type of relationship to be the prevalent one in advertising and photography. On the other hand, relay is a type of relationship where the text is more informative and the image is used to support the intended interpretation of the text. However, text and image have a complimentary relationship in the case of relay, both contributing to the overall meaning. This type of relationship is commonly found in comic strips and films.

Barthes' classification was largely adapted by Forceville (1996), who also focuses on the text-picture relationship in advertisements. However, Forceville discusses the limitations of Barthes' classification, such as the fact that the text-picture relationship can sometimes be both, that is relay and anchorage at the same time. To exemplify, Forceville (1996: 73) mentions that modern advertisements often aim to have quite perplexing meanings, functioning as a type of puzzle the consu-



mers have to put together. In such cases, the image is used as an anchor, which means that consumers have to look at the image to decipher the desired meaning of the advertisement. Consequently, the text and the image have a complimentary relationship, which means that the text-picture relationship is simultaneously that of anchorage and of relay. However, despite certain limitations, Barthes' terminology offers an effective way to discuss the text-image relationship and was used in the analysis of the data used in our study.

In the context of the text-picture relationship in the process of learning and meaning construal, it is maybe useful to draw a few comparisons between Barthes' terminology and Levin's five functions. Levin's five functions of images are dependent on their relationship to the text, i.e. they are defined in relation to the text. For example, decorative images, which can be defined as those that do not have a direct relation to the text, but merely decorate it (Carney & Levin 2002: 7), seem to use the text to anchor their intended meaning since they are less text-specific and have numerous potential meanings. However, due to the importance of the text in the context of EFL teaching material, anchorage will probably not be the prevalent type of text-picture relationship. In other words, relay will gain primacy as a type of relationship found in textbooks. More specifically, textbooks tend to contain texts accompanied by illustrations that are aimed at helping learners understand the content of the text. In terms of Levin's categorization, these illustrations are representational images, which are in fact partial or full visual paraphrases of the text (Geld & Stanojević 2018), and they are typical instances of relay. Finally, and most importantly, transformational images are also an example of relay - both text and image are used in meaning construction and the image does more than merely mirror the text. Accordingly, we wish to propose a redefinition of relay as a scalar type of relationship – the relationship whose nature varies according to the degree of “participation” of the image in meaning construction.

5. The Study

5.1. *Aim*

As already mentioned, our study focused on strategic construal of PVs with *down*. We were interested in the nature of bimodal strategic construal, that is: (a) the aspects of participants' textual and pictorial representations, and (b) their relationship.



Hence, our research questions were the following:

1. What are the meaning construal strategies activated in producing textual and pictorial representations of figurative meanings of PVs with *down*?
2. What is the prevalent text-picture relationship?

5.2. Sample

The data analysed in this qualitative study is part of a much larger data set collected by Geld (2009b). The original data had been collected using an instrument containing 93 meanings of PV constructions containing both semantically light (*go, take, put*) and heavy (*call, cut, break, draw, pull, shut, write*) lexical components and four particles (*up, down, in, out*). The data in question contained more than 8,000 verbal answers and approximately the same number of pictorial answers obtained from 68 Croatian and 32 Mexican speakers of English. Due to a large data set collected, Geld had initially coded, categorized, and analysed only the data set related to PV constructions with *in* and *out* (Geld 2009a). In the work she focused solely on verbal answers with a number of hypotheses pertaining to the role of lexical vs. topological components in the PV composite wholes as well as the role of the participants' L1 and language proficiency (Geld 2009a). Certain other portions of the raw data were coded and analysed later, depending on the focus of particular analysis (cf. Geld & Letica Krevelj 2011).

The participants' task was to make sense of the above mentioned 93 PV meanings. Each task consisted of one PV construction and its meaning without any additional context, for example: *cut down* 'kill'. The participants were asked to look at the PV and its meaning and explain what it is in the construction that produces the meaning given in the task. They were also provided a separate space next to their answers to "draw the meaning". Since our aim was to establish qualitative differences between textual and pictorial answers, we selected to analyse a relatively small portion of the original raw data: we focused on the answers obtained from ten most proficient Croatian participants. This decision was influenced by two facts: 1) previous research showed that more proficient L2 speakers are more likely to analyse PVs in a meaningful way, insofar as their proficiency positively correlated with their likelihood of establishing a connection between form and meaning (Geld & Letica Krevelj 2011), and 2) we wished to work with a relatively homogenous groups of participants in terms of cultural background and their L1. In addition, as Geld's original raw data contains answers pertaining to as many as 93 meanings of PVs that are composite wholes containing either *up, down, in, or out*, we decided to



focus only on the PVs with *down*. As stated earlier in the paper, this particle was found to be particularly informative for Croatian speakers of English, which was likely to result in a larger body of meaningful pictorial answers that may reveal tendencies in bimodal representations of meaning. Thus, our data set consisted of 440 answers (220 textual and 220 pictorial) pertaining to the following PV constructions – *pull down*, *call down*, *draw down*, *shut down*, *cut down*, *break down*, *put down*, *take down*, and *go down*.

5.3. Procedure

In order to categorise textual and pictorial representations and answer our first research question, we employed Geld's analytical tools and coding system (2009a). Even though her focus of analysis had been textual answers, the criteria for categorization proved to be equally adequate for coding our participants' pictorial answers. The first step in our analysis of both texts and drawings was to establish whether participants chose to attend to the PV components (e.g. *cut + down*) or they used other strategies (e.g. paraphrasing the figurative meaning provided in the task). If their strategy involved focus on the PV components, our next step was to determine which of the two components they found more salient in the composite whole – the particle (topological determination – coded TOP), the verb (lexical determination – coded LEX), or both components (compositionality – coded CMP). All the data were coded independently by two researchers. The codes were then compared and possible differences were discussed and resolved by consensus. In a few cases, the opinion of a third person resolved the differences between the two main researchers.

Let us exemplify both textual and pictorial answers that were categorised as topological (TOP). The task was the PV *go down* meaning 'be sent to prison':

- (1) *...if up is good, then down is bad, and prisons are bad...or maybe because dungeons used to be underground.*

This participant's answer suggests that the particle is a more salient component in the composite whole. The participant made sense of the whole phrase by referring to *down* and neglecting the lexical component of the PV. The particle is identified as an orientational preposition (Radden & Dirven 2007: 313–317) or, to be more precise, as a preposition coding vertical orientation in physical space (dungeons). The participant also mentions one of *down*'s figurative meanings by invoking the conceptual metaphor UP IS GOOD / DOWN IS BAD.



In the example that follows (cf. Figure 2) the task was the PV *put down* meaning ‘criticize somebody and make them feel stupid’. The participant invokes the conceptual metaphor BEING SUBJECT TO CONTROL OR FORCE IS DOWN, focusing on the particle in his/her interpretation of the PV in question. This pictorial answer was also categorized as topological.



Figure 2. Pictorial representation: *put down* ‘criticize somebody and make them feel stupid’

Conversely, if the focus of the participant’s analysis was the verb, the answer was categorised as lexical determination (LEX) (cf. Example 2 and Figure 3). In (2) the task was the PV *break down* meaning ‘change something by means of a chemical process’, and in Figure 3 the task was the PV *cut down* ‘kill somebody’.

- (2) ...for example when we say that water (H_2O) consists of oxygen and hydrogen, when we divide them they’re just oxygen and hydrogen on their own



Figure 3. Pictorial representation: *cut down* ‘kill somebody’

Finally, the last type of strategic construal including reference to PV components is the category labelled compositionality (CMP). This category includes reference to both the particle and the verb. Let us consider two examples from this category. The first is a textual answer to the task containing *break down* meaning ‘to



separate something into several parts so that it is easier to understand’:

- (3) *Break – to separate into two or more parts; Down – becoming less and less concise*

The participant explained the meaning of the both components. The components are even physically divided into two separate explanations, which made it easier for researchers coding the data to reach consensus on the category. The example that follows exemplifies the pictorial answer representing compositionality (cf. Figure 4). The verb is symbolically represented by the scissors, while the particle is represented by the downwards arrow. Therefore, this pictorial answer was also classified as compositional.

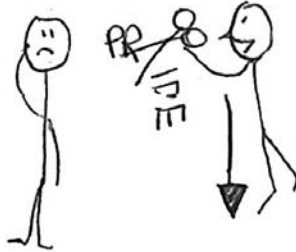


Figure 4. Pictorial representation: *cut down* – ‘kill somebody’

The three drawings discussed so far (cf. Figures 2, 3, and 4) are excellent examples of pictorial representations of meaning as a cognitively motivated phenomenon. The participants explained the contribution of the components by relating their meaning and form and thus demonstrated that they are able to strategically construct and make sense of figurative meanings that are traditionally rarely taught in a meaningful way and almost never pictorially presented in this manner. If we consider the nature of the drawings in terms of the functions of illustrations discussed in the introductory part of the paper, we may claim these drawings are transformational. The participants selected salient “elements” that contribute to the overall meaning and they situated them within conventional scenarios that are experientially familiar and can be easily recognized. Naturally, as mentioned at the beginning of this section, there were participants who used other strategies and produced drawings that could not be classified as transformational. For example, some of them simply paraphrased the meaning provided in the task, either in words or by drawing. So both textual and pictorial answers were frequently coded as paraphrase (PPH) or visual paraphrase (VPPH), respectively.



However, not all examples were clear-cut in terms of the categories described (TOP, LEX, CMP, PPH, and VPPH). In a number of cases, topological or lexical determination was intertwined with paraphrasing. In other words, the participants would produce conceptual blends (cf. Fauconnier & Turner 2003; Turner 2014) in both their textual and pictorial answers. For example, they would integrate topological component (cf. example 4 and Figure 5) or lexical (cf. Figure 6) into the paraphrase of the meaning provided in the task.

In example 4 (*take down* ‘remove a structure by separating it into pieces’), the participant integrated the explanation of *down* into the paraphrase of the figurative meaning provided in the task.

- (4) *A structure is usually vertically layered so if we want to decompose it, we must do it by “taking down” a layer after layer, by removing layers (parts) and putting them down on the ground*

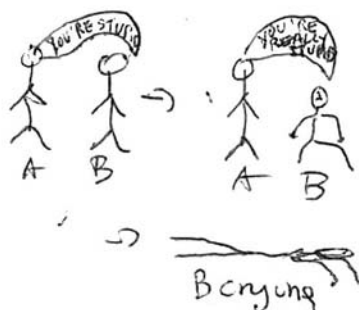


Figure 5. Pictorial representation: *put down* – ‘criticize sb and make them feel stupid’

The drawing representing *put down* includes the image of two conversations that stand for the figurative component of criticism and insult, reinforced by the text in the callouts, as well as the resulting state of a person being *down* on the ground (the topological component of the PV).

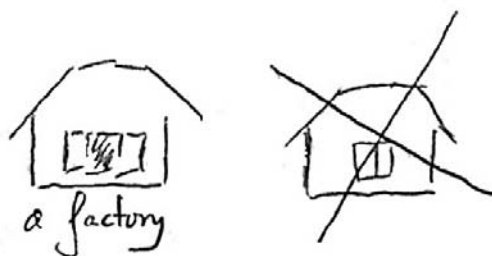


Figure 6. Pictorial representation: *shut down* – ‘stop something from operating’

Shutting down meaning ‘stop something from operating’ is illustrated by integrating the lexical component (*shut*) in the form of the door being open on the left and closed on the right, and the figurative meaning of ‘stopping’ in the form of the building on the right being crossed out.

Finally, there were several categories of answers that were not too informative. First, some participants misinterpreted the meaning and their explanation did not make sense (the category was coded MM). Second, sometimes their drawings could not be related to the PV constructions they were supposed to represent (the category was coded NIL – non-illustrative), and third, there were instances in which participants did not attempt to provide answers and such instances were classified either as no text (NT) or no picture (NP).

The above described categories enabled us to establish whether there were any differences in the strategic construal depending on the mode of expression. The purpose of this first part of the analysis was to answer our first research question pertaining to the nature of the textual and pictorial representations of meaning.

In order to answer our second research question, we examined the nature of the relationship between textual and pictorial answers. If the answers were given in such a way as to imply relation to one another, we applied Barthes’ classification and determined the type of text-picture relationships: relay vs. anchorage. Before proceeding to the results obtained, let us conclude this section with an example of relay (Figure 7) and anchorage (Figure 8), respectively.

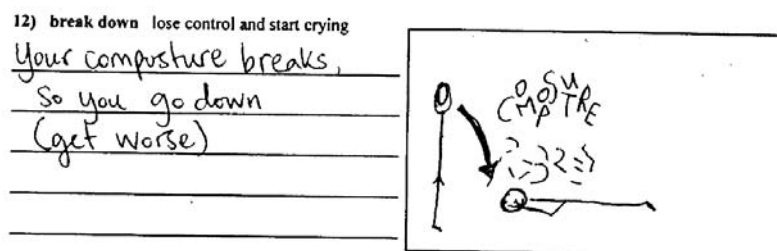


Figure 7. Example of relay: *break down* – ‘lose control and start crying’

Figure 7 shows an example of a complimentary text-picture relationship - the participant used both the text and the drawing to complete the task and interpret the meaning of the PV. The relationship in question is an example of relay (R). In contrast, Figure 8 demonstrates anchorage (A) - the drawing is very schematic and has numerous possible interpretations. The participant’s textual answer anchors the intended interpretation and disambiguates the content of the drawing. However, it is necessary to emphasise that anchorage was actually present in all of the answers



because the participants' drawings were partially anchored by the dictionary definitions of the PVs provided in the questionnaire (cf. Figures 7, 8).

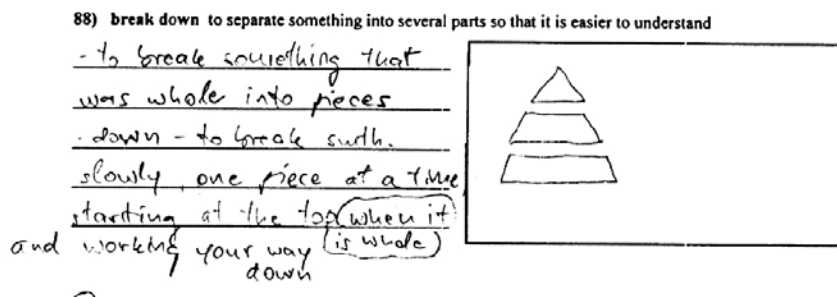


Figure 8. Example of anchorage: *break down* 'to separate something into several parts so that is easier to understand'

5.4. Results and discussion

5.4.1. Frequency and type of textual and pictorial representations of meaning

After all of the data had been coded, we first looked at the frequency of particular types of textual answers. The Majority of answers included either compositionality (CMP: 43.18%) or topology (TOP: 18.18%) (cf. Figure 9). The results suggest that the participants were generally very successful in making sense of the PV constructions. These results were somewhat expected since our sample consisted of the answers obtained from the most proficient participants. Nevertheless, there was still a considerable number of paraphrases (PPH: 7.73%) (cf. Figure 9). In the case of pictorial answers, the prevalent strategic construal was visual paraphrase (VPPH: 33.64%), followed by drawings containing topological elements (TOP: 22.27%) (cf. Figure 10). The least frequent answers were those relying on the lexical component (LEX) of the PV constructions. The percentage of textual answers with lexical determination was 8.18% and the percentage of pictorial answers was 7.73% (cf. Figure 10).

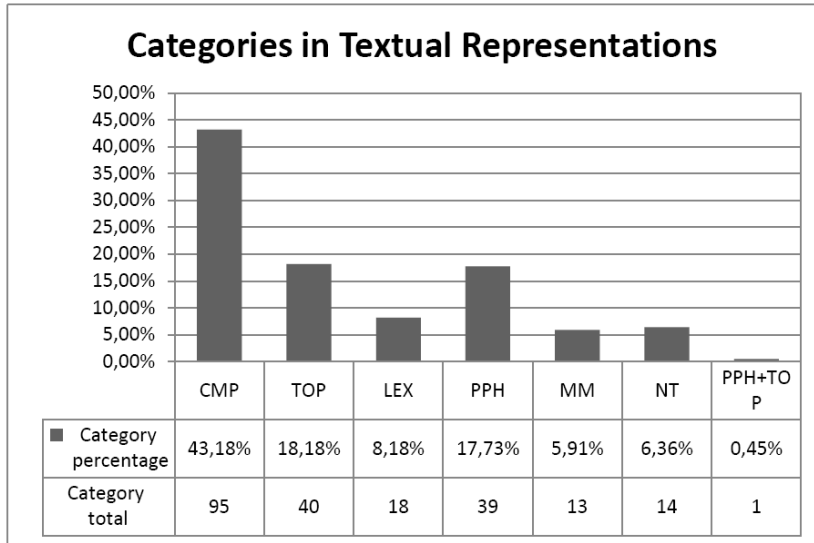


Figure 9. The frequency of categories in textual representations of meaning

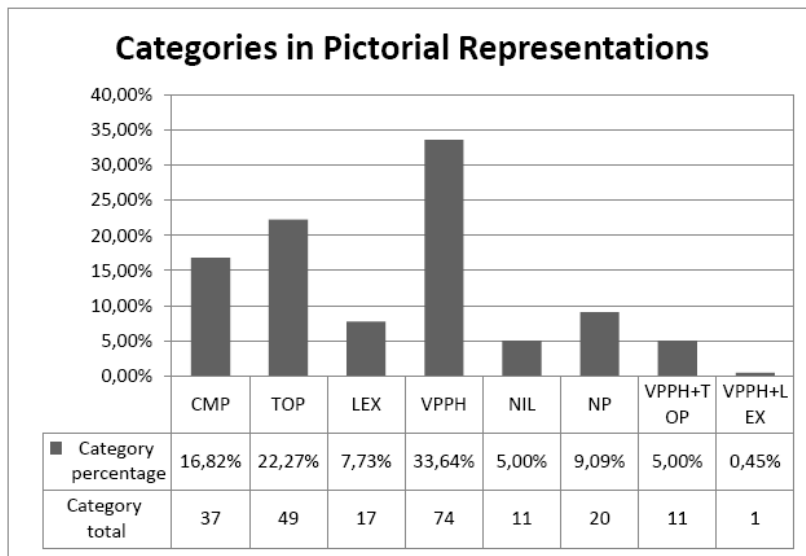


Figure 10. The frequency of categories in pictorial representations of meaning

As evident from the above presented results, the participants' strategic meaning construal shows different tendencies in the two modes examined in the study: verbal explanations and drawings. More specifically, the strategies used in the participants' textual answers indicate their ability to analyse the PVs in a meaningful



manner. They were able to notice cognitive motivation behind figurative meanings, that is, come to sensible conclusions regarding a motivated relationship between meaning and form. However, they seemed to be less successful in representing this relationship visually. Their main strategy was paraphrasing the meaning provided in the task without addressing the PV components and their contribution to meaning. Even though we can only speculate about the reasons for their tendency towards visual paraphrases as the main meaning construal strategy, we believe that one of the key reasons may be the fact that they are simply not used to drawing meaning. In Croatia, drawing is rarely encouraged after primary education and the language teaching material, as already mentioned, favours decorative and representational illustrations that facilitate understanding but do not encourage deeper processing of linguistic meaning (cf. Geld & Stanojević 2018). On the other hand, transformational images, especially those relying on cognitively motivated elements, are almost entirely neglected in textbooks. Secondly, the visual mode itself has certain limitations in terms of representing abstract entities. Geld & Stanojević (2018:138) interpret the disparity between the categories in textual and pictorial representations as a result of the limitations of the visual mode. More specifically, they believe that paraphrasing is a more frequent strategy in the participants' drawings because of the necessity of specifying abstract entities. The visual mode is dependent on symbols and analogies, and every attempt to represent an abstract entity somewhat more creatively requires considerable cognitive effort.

5.4.2. Text picture relationship in the strategic meaning construal

Due to differences between the strategies identified in textual answers and those in drawings, in addressing our second research question we decided to focus on the text–picture relationship only in those cases where textual answers included compositionality (43.18%) or topology (18.18%). Since our aim was to investigate the nature of strategic construal, which primarily implies meaningful and cognitively motivated construction of linguistic meaning, we focused on the nature of the relationship between the text and the drawing only in the above mentioned cases, that is in the cases where we were sure our participants were aware of the connection between form and meaning.

Before establishing the ratio between relay and anchorage, we first had to determine the number of answers in which our participants produced their texts and drawings in relation to one another. From the total of 135 answers, there were 102 answers in which the relationship was dependent whereas only 33 where the relationship was independent (cf. Table 1). To conclude, the text-picture relationship es-



established for cognitively motivated construal of PVs with *down* in the dataset selected for this qualitative analysis was found to be largely dependent.

Table 1. Text-picture relationship

Independent	Dependent	TOTAL
33 (24%)	102 (76%)	135

This result was somewhat surprising since the participants were in no way encouraged to produce their textual and pictorial representations in relation to one another. However, it is necessary to note that the form of the questionnaire might have influenced the participants' decision to establish a connection between the verbal and the visual mode since the designated space for textual answers was parallel to the designated space for the participants' drawings (cf. Figures 7 and 8). Due to this tendency to construct meaning in a bimodal manner, that is connect their textual and pictorial representations into a relatively integrated whole, we were able to make the final step in our analysis, that is determine the nature of the relationship - relay vs. anchorage. Quite expectedly, most text-picture relationships were identified as relay (R: 87%), with only a modest number of instances of anchorage (A: 13%) (Figure 11).

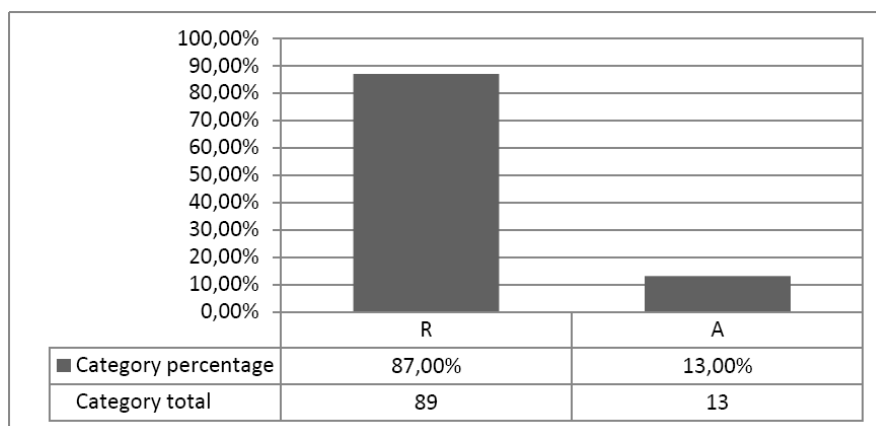


Figure 11. Dependent text-picture relationship

However, we should not ignore the fact that due to the nature of the task, the drawings had already been anchored by the dictionary definitions of the PVs that were included in the questionnaire. In other words, the form of the questionnaire itself produced a relationship of anchorage between the dictionary definitions included in the questionnaire and the participants' drawings (cf. Figures 7 and 8).



What is more, some of the drawings were further anchored by inserted textual elements (cf. Figures 5, 6, and 7). In other words, we can claim that some sort of anchorage was present in most text-picture relationships, albeit not in an overt manner, and reiterate that relay and anchorage are far from mutually exclusive and often co-exist in a sort of bidirectional or dual manner. Still, as already stated, our analysis showed prevalence of relay. As opposed to anchorage, in relay the text takes primacy inasmuch as it is more informative and in some ways a more dominant participant in meaning construal. The number of relays established in our participants' answers demonstrated that they provided more meaningful analysis of the PVs in their textual replies. In these cases, their drawings were frequently used to affirm, echo, or illustrate the meaning of the text. The dominance of text in their bimodal representations of meanings is somewhat at odds with our "visual world". However, for an ordinary speaker of language who is not accustomed to draw, visual expression of meaning is simply difficult, especially when it comes to abstract and figurative senses and fine nuances of meaning. This is partly due to the fact that drawing is generally under-utilized in education. Thus, even though we are bombarded by various images almost all the time, our skills of creating images and making use of images to convey meaning as well as process new information seem to be underdeveloped. Furthermore, it is possible that our participants were simply used to pictorial representations that have secondary roles in text-picture relations. Decades of research have shown that the so-called "good language learners" develop strategies on their own, that is without formal instruction pertaining to strategic thinking and learning. They are exposed to language input and they abstract rules and develop strategies to process this input and retain the information in question. Since language learning customarily includes visual aids that provide contexts for understanding language input, it is reasonable to assume that learners of language develop strategies to recognize the role of images. Naturally, this receptive skill is likely to develop into a productive skill that enables them to find their way to express themselves visually. In other words, they learn from what they see. However, fortunately, learning is not copying. Our participants have shown that they go beyond decorative and representational images that are prevalent in EFL textbooks, and they have strategically construed meaning in a bimodal manner exemplifying text-picture relations that are not too frequent in language teaching material.

6. Conclusion

We aimed at investigating meaning construal strategies pertaining to both textual and visual representation of linguistic meaning. We analysed the nature of L2 spe-



akers' textual and pictorial answers in terms of what they find salient in 22 figurative meanings of English PV constructions. Moreover, we were interested in the relationship between pictorial and textual representations, that is, possible dominance of one over the other. The results showed the following:

1. Textual answers were largely compositional or topological: the participants explained the meaning of PV constructions by relating it to their component(s).
2. Pictorial answers were mostly visual paraphrase: the participants were less likely to make sense of the PV constructions and the contribution of their components. Their primary strategy was illustrating the figurative meaning of the construction.
3. The predominant text-picture relationship was a dependent type of relationship.
4. The most frequent type of text-picture relationship was that of relay.

As demonstrated in other studies as well, L2 speakers are quite capable of thinking strategically about linguistic meaning, especially proficient and experienced language learners. Our participants were quite successful in “detecting” the semantic contribution of the particle, the verb or both components and their role in the overall meaning of the PV construction, which was particularly evident in their textual answers. Although there were many examples of pictorial answers in which they meaningfully analysed the PVs, pictorial answers were most frequently visual paraphrases. Most evidently, the participants approached the task of writing and drawing very differently. We discussed possible reasons for the established differences in their visual expression, such as the participants' inexperience in drawing, the inherent limitations of the visual mode, and the influence of images found in their language learning material. These assumptions were reinforced by the prevalence of relay as a type of text-picture relationship, which suggests that participants approached the text as the primary means of expression, with the image playing a secondary role. Considering that our learners' world is an exceedingly visual one, it appears that images are under-utilised in TEFL, especially those that facilitate not only understanding but deeper processing and retention.



References

- Barthes, Roland. 1964. Rhetoric of the image. Sel. and Trans. by Heath, Stephen 1977. *Image, music, text*. London: Fontana Press, 32–51. <https://doi.org/10.2307/j.ctt183p71d.5>
- Basal, Ahmet & Celen, Kıymet Merve & Kaya, Halime & Bogaz, Şeyma Nur. 2016. An investigation into illustrations in English course books in a Turkish context. *International Electronic Journal of Elementary Education* 8. 525–536.
- Boers, Frank & Demecheleer, Murielle. 1998. A cognitive semantic approach to teaching prepositions. *ELT Journal* 52.197–203. <https://doi.org/10.1093/elt/52.3.197>
- Cacciari, Cristina & Glucksberg, Sam. 1995. Understanding idioms: Do visual images reflect figurative meanings? *European Journal of Cognitive Psychology* 7. 283–305. <https://doi.org/10.1080/09541449508402450>
- Carney, Russel N. & Levin, Joel R. 2002. Pictorial illustrations still improve students' learning from text. *Educational Psychology Review* 14. 5–26.
- Celce-Murcia, Marianne & Larsen-Freeman, Diane. 1999. *The grammar book: An ESL/EFL teacher's course*. USA: Heinle & Heinle.
- Dretzke, Beverly J. 1993. Effects of pictorial mnemonic strategy usage on prose recall of young, middle-aged, and older adults. *Educational Gerontology* 19. 489–502. <https://doi.org/10.1080/0360127930190602>
- El Refaie, Elisabeth. 2003. Understanding visual metaphor: the example of newspaper cartoons. *Visual Communication* 2. 75–95. <https://doi.org/10.1177/1470357203002001755>
- Fauconnier, Gilles & Turner, Mark. 2003. Polysemy and conceptual blending. In Nerlich, Brigitte & Herman, Vimala & Todd, Zazie & Clarke, David (eds.), *Polysemy: Flexible patterns of meaning in mind and language*, 79–94. Berlin / New York: Mouton de Gruyter. <https://doi.org/10.1515/9783110895698.79>
- Forceville, Charles J. 1996. *Pictorial metaphor in advertising*. London: Routledge.
- Forceville, Charles J. 2008. Metaphor in pictures and multimodal representations. In Gibbs, Raymond W. (ed.), *Cambridge handbook of metaphor and thought*, 462–482. New York: Cambridge University Press. <https://doi.org/10.1017/cbo9780511816802.028>
- Geld, Renata. 2009a. *From topology to verbal aspect: Strategic construal of in and out in English particle verbs*. Faculty of Humanities and Social Sciences, University of Zagreb.
- Geld, Renata. 2009b. [From topology to verbal aspect: strategic construal of in and out in English particle verbs]. Unpublished raw data.
- Geld, Renata. 2011. Topological vs. lexical determination in English particle verbs. *Language Value* 3. 49–75. <https://doi.org/10.6035/LanguageV.2011.3.4>
- Geld, Renata & Letica Krevelj, Stela. 2011. Centrality of space in the strategic construal of up in English particle verbs. In Brdar, Mario & Omazić, Marija & Buljan, Gabrijela &



- Bagarić, Vesna & Gradečak-Erdeljić, Tanja (eds.), *Space and time in language*, 145–166. Frankfurt: Peter Lang Verlag.
- Geld, Renata & Maldonado, Ricardo. 2011. Strategic construal of in and out in English particle verbs (PVs). *Language Value* 3. 76–113. <https://doi.org/10.6035/languagev.2011.3.5>
- Geld, Renata & Stanojević, Mateusz-Milan. 2016. Topologically biased construal in offline processing: the case of up and down in the language of the blind. *Suvremena Lingvistika* 42. 1–25.
- Geld, Renata & Stanojević, Mateusz-Milan. 2018. *Strateško konstruiranje značenja riječju i slikom – konceptualna motivacija u ovladavanju jezikom*. Zagreb: Srednja Europa.
- Gibbs, Raymond W. & O'Brien, Jennifer E. 1990. Idioms and mental imagery: The metaphorical motivation for idiomatic meaning. *Cognition* 36. 35–68. [https://doi.org/10.1016/0010-0277\(90\)90053-m](https://doi.org/10.1016/0010-0277(90)90053-m)
- Janyan, Armina & Andonova, Elena. 2000. The role of mental imagery in understanding unknown idioms. In Gleitman, Lila R & Joshi, Aravind K. (eds.), *Proceedings of the 22nd annual conference of the Cognitive Science Society*, 693–698. Mahwah: Lawrence Erlbaum Associates.
- Kress, Gunther & Van Leeuwen, Theo. 2006. *Reading images: The grammar of visual design*. 2nd edn. London: Routledge.
- Kurtyka, Andrzej. 2001. Teaching English phrasal verbs: a cognitive approach. In Pütz, Martin & Niemeier, Susanne & Dirven, René (eds.), *Applied cognitive linguistics II: Language pedagogy*, 22–55. Berlin: Mouton de Gruyter. <https://doi.org/10.1515/9783110866254.29>
- Lakoff, George & Johnson, Mark. 1980. *Metaphors we live by*. Chicago: The University of Chicago Press.
- Langacker, Ronald Wayne. 2008. *Cognitive grammar: A basic introduction*. Oxford: Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780195331967.001.0001>
- Levin, Joel R. 1983. Pictorial strategies for school learning: Practical illustrations. In Pressley, Michael & Levin, Joel R. (eds.), *Cognitive strategy research: Educational applications*, 213–237. New York: Springer-Verlag. https://doi.org/10.1007/978-1-4612-5519-2_8
- Nippold, Marilyn A & Duthie, Jill K. 2003. Mental imagery and idiom comprehension: A comparison of school-age children and adults. *Journal of Speech, Language and Hearing Research* 46. 788–799. [https://doi.org/10.1044/1092-4388\(2003\)062](https://doi.org/10.1044/1092-4388(2003)062)
- Radden, Günter & Dirven, René. 2007. *Cognitive English grammar*. Amsterdam: John Benjamins Publishing Company. <https://doi.org/10.1075/clip.2>
- Romney, Cameron. 2012. Images in ELT textbooks: Are they just decoration? In Stewart, Alison & Sonda, Nozomu (eds.), *JALT2011 Conference Proceedings*, 27–33. Tokyo: JALT.



- Rosso, Mirna. 2017. *Aspects of visual representation of idioms in teaching English as a foreign language*. Unpublished master's thesis, Zagreb: University of Zagreb.
- Rudzka-Ostyn, Brygida. 2003. *Word power: Phrasal verbs and compounds, a cognitive approach*. Berlin: Mouton de Gruyter. <https://doi.org/10.1515/9783110197235>
- Turner, Mark. 2014. *The origin of ideas: Blending, creativity, and the human spark*. New York: Oxford University Press.
- Yasuda, Sachiko. 2010. Learning phrasal verbs through conceptual metaphors: A case of Japanese EFL learners. *TESOL Quarterly* 44. 250–273.

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TEKST I SLIKA U STRATEŠKOM RAMIŠLJANJU O JEZIČNOM ZNAČENJU

Cilj je ovog istraživanja bio ispitati sposobnost strateškog razmišljanja o značenju kod govornika engleskoga kao drugog jezika. Od sudionika se tražilo uočiti potencijalnu smislenost 22 figurativna značenja engleskih fraznih glagola s topološkom česticom *down*, što je iznimno zahtjevan zadatak za govornike engleskog kao drugog jezika. U središtu nam je zanimanja bilo dvomodalno konstruiranje značenja, odnosno prikaz značenja riječju i slikom. Analizirali smo sadržaj odgovora te odnos dvaju modaliteta. Željeli smo utvrditi koji elementi su najistaknutiji, na koji način ulaze u međusobne odnose, te koja vrsta odnosa dominira. Od osobitog su nam interesa bile sastavnice fraznoga glagola – topološke i leksičke čestice. Rezultati su pokazali da su sudionici skloniji smislenost značenja fraznih glagola pripisati topološkim i leksičkim sastavnicama u svojim pisanim odgovorima. S druge strane, u crtežima su naglašenija figurativna značenja ponuđena u upitniku. Također je ustanovljeno da su tekstualni odgovori i crteži uglavnom povezani. U analizi odnosa korištene su Barthesove funkcije – relej i sidrište. Pokazalo se da je odnos tekstualnih odgovora i crteža najčešće imao relejnu funkciju, odnosno da je u odnosu teksta i slike značajnija bila uloga teksta.

Ključne riječi: Engleski frazni glagoli; strateško konstruiranje značenja; tekstualni prikaz; slikovni prikaz; relejna funkcija; sidrišna funkcija.