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English phrasal verbs in the domain of *healthcare/medicine*: A cognitive semantic analysis

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Abstract

Cognitive entrenchment of lexical units such as phrasal verbs is one of the central issues in cognitive linguistics, as it highlights the fact that their meaning is not arbitrary, but systematically motivated. However, the semantic motivation of English HEALTHCARE/MEDICINE-related phrasal verbs has received limited attention. Understanding their conceptual nature is essential for broader insights into the complex interplay between language and cognition. The main aim of this study is to ascertain the cognitive salience of English phrasal verbs in the domain of HEALTHCARE/MEDICINE. Specifically, it seeks to determine the underlying image-schematic structure of the observed phrasal verbs and examine the conceptual mappings responsible for their further meaning extension. The study involves a total of 105 HEALTHCARE/MEDICINE-related phrasal verbs containing 18 different particles with 109 different senses. Data were collected through an authoritative phrasal verb dictionary and complemented by the language material taken from two representative electronic corpora of the English language. The linguistic evidence was analysed using a qualitative cognitive-semantic analysis to identify the phrasal verbs' cognitive entrenchment. The analysis revealed that both constituent components making up a phrasal verb contribute to the overall meaning of the researched phrasal verbs. In all the observed phrasal verbs, two different types of meanings were ascertained and analysed. These are (1) the general meaning (stemming from the image-schematic structure of the particle) and (2) the specific meaning (construed via conceptual metaphors and metonymies entrenched in the base verb). The results suggest that the meaning of the phrasal verbs under exploration is cognitively salient to a high degree. They contribute to the understanding of phrasal verbs by highlighting the cognitive mechanisms that motivate the meaning of these linguistic units. The findings have implications for future semantic analyses of the same or similar lexical items (e.g. phrasal verbs belonging to other domains or prefixed verbs). (примљено: 7. марта 2025; прихваћено: 5. јула 2025)

1. Introduction

The paper focuses on the complex conceptual semantic structure of English phrasal verbs in the domain of HEALTHCARE/MEDICINE observed through the lens of cognitive semantics.¹ In total, 105 English phrasal verbs containing eighteen particles (*off, up, down, out, in, on, away, through, over, into, round, onto, back, at, against, from, under* and *together*) with 109 different senses are extracted from an authoritative English phrasal verb dictionary and analysed in terms of the conceptual tools which motivate their semantic structure.² The cognitive approach to the semantics of linguistic units explores their meaning dimensions employing notions such as semantic motivation, language conceptualisation, conceptual mapping, image schemas, spatial schematisation and profiling (Lakoff, 1987; Johnson, 1987; Langacker, 1987; 2013; Talmy, 1983; 2000; Geeraerts, 2006; Kövecses, 2002; 2020, etc.), which have so far proven to be useful analytical tools for decoding the intricate semantic dimensions of units such as phrasal verbs (Brugman, 1981; Lindner, 1981; Morgan, 1997; Hampe, 2002; Rudzka-Ostyn, 2003; Mahpeykar/Tyler, 2015; Milošević 2016).

The assumptions about the cognitive entrenchment of the language of *healthcare* and *medicine* can be traced back to the very beginnings of the cognitive linguistic orientation (Lakoff/Johnson, 1980: 15). Shedding light on the conceptual semantic dimensions of utterances such as *He's in top shape*, *As to his health, he's a way up there*, *His health is declining*, *He fell ill*, etc., these authors claim these expressions are centred on the following notions – HEALTH IS UP and SICKNESS IS DOWN. Also, Ruiz de Mendoza and Galera-Masegosa (2011: 7, 18–19) refer to the conceptual background of some medical utterances by examining certain metonymic and metaphorical mappings entrenched in their semantic framework (e.g. MEDICAL CONDITION FOR PATIENT WITH MEDICAL CONDITION – *The broken arm in the waiting room says he needs another painkiller urgently*, or A DISEASE IS A MOVING OBJECT – *He traced my symptoms back to the cause of my disease*). In a different light, Hodgkin (1985) brings the metaphor MEDICINE IS WAR into focus from a pragmatic standpoint, stating that awareness of such metaphorical concepts can assist in forming our attitudes towards medicine. A similar line of reasoning is presented by Bleakly (2017), who indicates that medical language is soaked in metaphors; hence, the author posits different medical metaphors as crucial for shaping medical identities and practices of doctors, patients, etc. (e.g. ILLNESS IS A JOURNEY, MEDICINE IS WAR, THE BODY IS A MACHINE, etc.).

With regard to the subject of this paper and the theoretical framework applied in this semantic analysis, the primary goal of this research is to ascertain the cognitive salience of the phrasal verbs in the domain of HEALTHCARE/MEDICINE. In short, the paper aims at: (1) determining the image-schematic structure of the

1 According to the cognitive-linguistic writing conventions, SMALL CAPITALS are used for conceptual domains and entities involved, conceptual metaphors/metonymies and image-schematic concepts (e.g. schemas).

2 Precise information regarding the presentation order of the particles and the lexicographic resource are given in Section 2, which outlines the methodology and data analysis.

observed phrasal verbs, that is, identifying and analysing the underlying spatial configurations that motivate the semantic framework of the constituent particles, which is related to the general meaning of the investigated phrasal verbs; (2) detecting and examining the conceptual mappings (conceptual metaphors and conceptual metonymies) responsible for further meaning extension of the observed phrasal verbs' concrete and abstract senses.

The paper is structured in the following way. The first section highlights the cognitive semantic approach to the study of English phrasal verbs and points to the key cognitive tools employed in the semantic analysis of the given lexical segment. The second section reflects on the linguistic evidence selected for the investigation. It outlines the methodology and data analysis. The results section of the paper presents, organises and explicates the semantic analysis of the English phrasal verbs in the domain of HEALTHCARE/MEDICINE. The final part of the paper summarises the obtained findings and proposes further research implications.

2. Phrasal verbs observed through the lens of cognitive semantics

The intrinsic semantic complexity of English phrasal verbs has presented a challenge to numerous linguists grappling with their semantics. This was particularly the case in the pre-cognitivist era when the meaning of phrasal verbs was observed as highly arbitrary, unpredictable and non-transparent. Authors such as Palmer (1965), Bolinger (1971) and Fraser (1976) did not observe phrasal verbs through the lens of their semantics, but concentrated on their syntactic dimensions, which led to a highly unsystematic semantic analysis of the given linguistic expressions. Nevertheless, over the course of time, different phrasal verb studies resting on the cognitive linguistic theoretical tenets (cf. Lakoff/Johnson, 1980) have shown that phrasal verbs are semantically motivated, (partially) compositional and conceptually organised (Lindner, 1981; 1982; Yeagle, 1983; Morgan, 1997; Hampe, 2000; 2002; Dirven, 2001; Rudzka-Ostyn, 20003; Silvestre Lopez, 2009; Mahpeykar/Tyler, 2015; Milošević, 2016; 2024; Milošević/Vesić Pavlović, 2017; 2020, etc.). On this view, the meaning of phrasal verbs is not a result of arbitrary relations between words. On the contrary, it is structured and motivated by various cognitive mechanisms grounded in the conceptual semantic framework of the constituent components making up the phrasal verb, such as spatial schematisation, image-schematic transformations, conceptual metaphor and conceptual metonymy.

The paper employs the notions of *spatial schematisation* (Talmy, 1983; 2000) and *conceptual profiling* (Langacker, 1987; 2013). Both have been extensively used as the key cognitive tools in the semantic analysis of phrasal verbs. A special schematisation of meaning is generated by *image schemas*, which represent coherent and meaningful gestalts within human experience and cognition (Johnson, 1987: 41). Image schemas are instantiated through certain *spatial configuration/scenes* (resulting from image-schematic transformations) underlying the semantic structure of lexical units. Accordingly, one portion within the spatial scene is selected for the primary focus (the *TRAJECTOR*) with a view to describing its spatial

disposition in terms of a second portion singled out for the secondary focus (the LANDMARK), simultaneously serving as the point of reference for the trajector (Talmy, 1983: 231–233; Langacker, 1987: 183–189; Talmy, 2000: 182–184).³ In other words, the trajector is the focal object in a scene. As observed by Talmy (2000: 182–184), the trajector (the primary object) seems to be more movable, smaller, geometrically simpler, more recently on the scene and of more relevance, whereas the landmark (the secondary object) appears to be more permanently located, larger, geometrically more complex in its treatment, earlier on the scene and of lesser relevance. In the sentences *The boy fell off the horse* and *The bike stood near the house*, the boy and the bike represent the trajector, whereas the horse and the house represent the landmark. In the light of the semantics of phrasal verbs, these spatial configurations/scenes are regarded as the primary conceptual tools responsible for the coding of the conceptual semantic framework of the constituent particle(s).

As for the meaning extension of phrasal verbs with regard to their abstract and metaphorical contents, it is typically achieved through two other cognitive mechanisms or conceptual mappings, that is, *conceptual metaphor* and *conceptual metonymy*. Initially proposed by Lakoff and Johnson (1980), these two mechanisms of thought characterised by numerous linguistic and extralinguistic manifestations are regarded as central to the study of meaning. Thereby, both conceptual metaphor and conceptual metonymy are viewed as mechanisms which are responsible for the constitution and organisation of lexical units' semantic framework.

Conceptual metaphor is a cross-domain mapping in which one domain of experience, typically abstract or less familiar (labelled as the *target domain*), is understood in terms of another, typically concrete or more familiar domain (labelled as the *source domain*). As argued by Kövecses (2020: 2), conceptual metaphor involves a set of systematic ontological correspondences or mappings between two experiential domains, with one domain (the source domain) mapping its elements and relations onto the other domain (the target domain). The following examples will suffice to illustrate the conceptual metaphor characterisation – EMOTIONS ARE FORCES, PURPOSES ARE DESTINATIONS, INTENSITY IS HEAT, LIFE IS A JOURNEY, LOVE IS WAR, TIME IS MONEY, INFLATION IS AN ENTITY. These systematic mappings and correspondences may be illustrated by LOVE IS WAR metaphor. As can be discerned from the given examples – *He fled from her advances. He is known for his many rapid conquests. She fought for him, but her mistress won out. He is slowly gaining ground with her.*⁴ – the domain of LOVE is semantically structured via a set of conceptual links formed between the source domain of WAR and the target domain of LOVE, such as WARRIORS → LOVERS, AN ENEMY → A MISTRESS, GAINING TERRITORY → COURTING, BATTLE CONQUEST → SEDUCTION. Consequently, this generic set of systematic correspondences mapped from the domain of WAR onto the domain of LOVE brings

3 Unlike most authors of the cognitive linguistic orientation who use the terms *trajector* and *landmark* (Brugman, 1981; Lindner, 1981; 1982; Lakoff, 1987; Boers, 2006, etc.), Talmy (1983, 2000) employs the terms *figure* and *ground* (adopted from Gestalt Psychology), whereas Langacker (1987) labels them *profile* and *base*.

4 The following illustrative examples are taken from Lakoff and Johnson (1980: 49).

to the foreground the semantic dimensions of the aforementioned metaphorical expressions.

In conceptual metonymy, the mapping involves different entities structured within the same domain (within-domain mapping). As Rasulić (2016: 17) puts it, “one salient concept (VEHICLE/SOURCE) provides mental access to another concept (TARGET) associated with it within a conceptual structure containing both of them”. Kövecses and Radden (1998) explain that conceptual metonymy is a relation between two contiguously related entities, and it may be characterised as the use of one entity to denote and/or refer to another entity that is logically related to the first one (e.g. THE PART FOR THE WHOLE – *We need an extra hand in the kitchen*, PRODUCER FOR PRODUCT – *He bought a Ford*, THE PLACE FOR THE INSTITUTION – *Wall Street is in a panic*). The authors analyse the metonymy phenomenon through the prism of idealised cognitive models (ICMs).⁵ Given the assumption that metonymy is viewed as a relation between two contiguously related entities, the relation of one conceptual entity to another within an ICM can be perceived as an instance of metonymy (Kövecses/Radden, 1998: 54–55). Drawing on this ICMs-metonymy interface, Kövecses and Radden provide a list of categorised ICMs such as Action ICM, Causation ICM, Production ICM, Perception ICM, etc.⁶ Given the subject matter, the Action ICM which comprises metonymic mappings (e.g. INSTRUMENT FOR ACTION, MANNER OF ACTION FOR THE ACTION, MEANS FOR ACTION, ACTION FOR THE OBJECT INVOLVED IN THE ACTION) proves to be particularly significant for explaining the semantic structure of phrasal verbs under exploration in this paper.

With reference to this systematically organised cognitive approach, the polysemy of phrasal verbs is generally perceived as a network of conceptual semantic extensions motivated by the abovementioned cognitive tools forming a *radial category of meaning*. Here different senses of a linguistic unit are structured within an elaborate cognitive paradigm. A radial category of meaning refers to a cognitive relationship established between a prototype, a central category which tends to be a concrete entity, and other category members or subcategories, that is, variants of more central categories which can be either concrete or abstract entities, thus forming networks of related meanings or meaning chains (e.g. Brugman, 1981; Lakoff, 1987; Taylor, 1989; Tyler/Evans, 2001; Brugman/Lakoff, 2006).⁷ Let us consider now the following example of a meaning chain or a *family resemblance category* (cf. Taylor, 2003[1989]: 113–116): *The plane flew over the city, He walked over the hill, He turned over the stone, He walked all over the city, He put the hands over his face*, etc. The author makes a compelling case in showing that different senses of the polysemous particle *over* constitute a complex family of related meanings as a result of meaning extension via different cognitive tools (primarily spatial scenes and conceptual metaphor).

5 As Lakoff (1987: 69) suggests, idealised cognitive models (ICMs) are structured wholes which organise our knowledge in the light of category structures and prototype effects.

6 For a detailed ICMs categorisation, see Kövecses and Radden (1998).

7 For an elaborate insight into *radial categories of meaning*, see Lakoff (1987: 91, 416–461).

On the basis of these cognitive linguistic postulates, numerous authors have carried out in-depth semantic explorations of English phrasal verbs. For instance, in her pioneering study, Lindner (1981: 75–141) detects three basic image-schematic structures underlying nearly all the meanings of the phrasal verbs with the particle *out*, with each subsequent structure being less prototypical than the previous one: OUT-1, OUT-2 and OUT-3. The first schematic structure OUT-1 evokes a conceptual scene between two separate entities, the trajector and the landmark (e.g. *John went out of the room*), the second structure OUT-2 codes the change of a shape of a single entity (trajector = landmark) featuring earlier and later locations of the same entity (e.g. *Roll out the red carpet*), the third schema OUT-3 profiles the movement of an entity, that is the trajector, away from the point of origin, that is the landmark (e.g. *He set out on a business trip*). In the same study, Lindner (1981: 148–226) identifies the basic prototypical schematic structures that motivate meanings of the phrasal verbs with the particle *up*, which she labels as VERTICALLY-ORIENTED UP-1 (e.g. *The cat climbed up the tree*) and GOAL-ORIENTED UP-2 (e.g. *He walked/came up and said hello*). In the VERTICALLY-ORIENTED UP-1 schematic structure, the landmark is related to the vertical axis, whereas in the GOAL-ORIENTED UP-2 structure the landmark is associated with the goal. Building on Lindner (1981), Morgan (1997) and Hampe (2000) argue that both constituent components of a phrasal verb (the base verb and the particle) actively contribute to the overall meaning of phrasal verbs. In particular, Morgan (1997: 343–345) demonstrates the phrasal verb *figure out* (e.g. *Figure out the solution*) is simultaneously extended via the metaphor THINKING IS CALCULATING grounded in the base verb *figure* and the metaphor A PROBLEM IS A LOCKED CONTAINER entrenched in the particle *out*. Following the same cognitive linguistic line of research, Rudzka-Ostyn (2003) focuses on the semantics of seventeen English particles providing ample linguistic material organised around each particle with clear insights into the extended meanings of each particle. Ultimately, Milošević (2016) conducts an extensive semantic analysis of the English phrasal verbs containing the opposite particles *in* : *out* and *on* : *off*. The author identifies sets of spatial scenes that structure the general image-schematic meanings of the observed phrasal verbs (stemming from the CONTAINMENT and SUPPORT schemas respectively) and detects numerous conceptual mappings responsible for the phrasal verbs' meaning extension into abstract domains.

3. Data collection and methodology of analysis

The selection of the observed linguistic data was performed in the following way. First, a total of 12,000 instances of some 7,000 English phrasal verbs listed in the referent phrasal verb dictionary – *Oxford Phrasal Verbs, Dictionary for Learners of English*, 2nd edition, (Oxford University Press, 2021[2006]) – were examined with a view to detecting and extracting HEALTHCARE/MEDICINE-related phrasal verbs. Second, the dictionary-excerpted data were complemented by the language material taken from the two representative electronic corpora of the English language, the *British National Corpus* (BNC) and the *Corpus of Contemporary American English*

(COCA). This was done for the following reasons: a) the dictionary lists the phrasal verb and the meaning definition, but it does not provide an illustration/example; b) the example given in the dictionary is not sufficiently illustrative regarding semantic dimensions of the observed phrasal verbs. As a result, a total of 105 HEALTHCARE/MEDICINE-related phrasal verbs containing 18 different particles with 109 different senses were extracted from the dictionary/corpora – 102 phrasal verbs with one sense, 1 phrasal verb (*go down*) with three different senses, and 2 phrasal verbs (*take out* and *put out*) with two different senses. Next, within each respective particle, all the extracted phrasal verb instances were grouped into concrete and abstract senses. Then, the cognitive entrenchment of the identified phrasal verbs' concrete and abstract senses was tested along two parallel analytical lines: first, the semantics of the researched phrasal verbs was viewed through the prism of their primary image-schematic structure casting light on different spatial configurations grounded in the constituent particles; second, further/additional phrasal verb meaning construction was observed in the light of different conceptual mappings (metaphors and metonymies) entrenched in the constituent verb and/or particle. Finally, the identified cognitive scenario of the examined phrasal verbs was outlined and discussed with reference to the paper's goals.

4. Results and discussion

This section features the cognitive semantic analysis of the English phrasal verbs containing 18 different particles (*off*, *up*, *down*, *out*, *in*, *on*, *away*, *through*, *over*, *into*, *round*, *onto*, *back*, *at*, *against*, *from*, *under* and *together*) in the domain of HEALTHCARE/MEDICINE. In all the observed phrasal verbs, two different types of meanings are ascertained and analysed. These are (1) the general meaning and (2) the specific meaning. On the one hand, the general meaning is associated with image-schematic structures or spatial configurations motivating the constituent particle(s). In other words, the general meaning is identified and explicated with respect to geometrical, topological and force-dynamic patterns formed between the trajector and the landmark within the given conceptual scene. On the other hand, the specific meaning refers to a non-schematic meaning construed via different conceptual metaphors and conceptual metonymies entrenched in the semantic framework of the constituent/base verb(s).

The presentation of the research findings is organised in line with the number of spatial configurations which structure the semantic framework of each observed constituent particle. In other words, the presentation of the findings starts from the particles structured by the highest number configurations (e.g. *off* – 7 configurations, *up* – 6 configurations) all the way to the particles coded by the lowest number of configurations (e.g. *against*, *from*, *under* and *together* – 1 configuration). As regards the order in which the analysed spatial configurations within the semantic framework of each researched particle are presented, it is in accord with the prototypicality of the semantic structures of the given configurations, with each subsequent configuration being less prototypical than the previous one. Given the

vast scope of the analysis and comprehensive linguistic material under observation, it should be noted that only the most illuminative corpus-based examples have been selected to illustrate the pertinent research findings.

4.1. Phrasal verbs with the particle *off*

Insights into the conceptual structure of the observed phrasal verbs with the particle *off* have revealed 7 spatial configurations motivating their meaning.

● TR GETTING OFF THE PHYSICAL SUPPORT (LM)

The example shown in (1) demonstrates that the configuration TR GETTING OFF THE PHYSICAL SUPPORT (LM) (Figure 1) is primarily responsible for coding the abstract meaning of the phrasal verb *come off* by means of the metaphor THE LACK OF MEDICAL THERAPY IS THE LACK OF MEDICAL SUPPORT.⁸

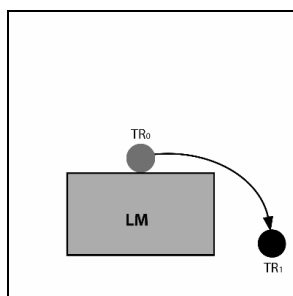


Figure 1. SC-1 – TR GETTING OFF THE PHYSICAL SUPPORT (LM)

- 1) It's time she tried *to come off* sleeping pills. (OXD)

● TR TAKEN OFF THE PHYSICAL SUPPORT (LM)

Along similar lines, the metaphorical mapping THE LACK OF MEDICAL THERAPY IS THE LACK OF PHYSICAL SUPPORT also profiles the meaning of *take off* (2), but with a crucial difference. Unlike the previous case of conceptualisation in which the motion of the trajector seems to be self-induced, a physical entity (TR) in this conceptual scene is taken off the surface/physical support (LM) by some external force. This is done via the underlying configuration TR TAKEN OFF THE PHYSICAL SUPPORT (LM) (Figure 2).

⁸ Cf. Milošević (2024: 52).

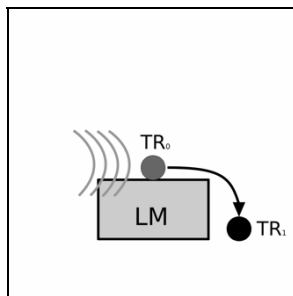


Figure 2. SC-2 – TR TAKEN OFF THE PHYSICAL SUPPORT (LM)

2) The doctor *took him off* tranquillizers. (OXD)

● TAKING TR FROM THE PHYSICAL SUPPORT (LM) AND SENDING IT AWAY

The general meaning of the phrasal verb *cart off* (3) is first and foremost conceptualised via the configuration TAKING TR FROM THE PHYSICAL SUPPORT (LM) AND SENDING IT AWAY (Figure 3). Additionally, the phrasal verb's specific meaning is construed by means of the metonymic mapping INSTRUMENT FOR ACTION, which frames the base verb (*cart*).

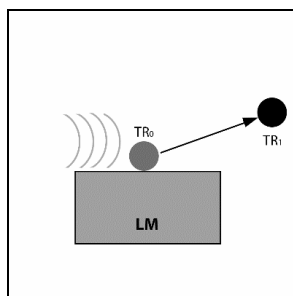


Figure 3. SC-3 – REMOVING TR FROM THE PHYSICAL SUPPORT (LM) AND SENDING IT AWAY

3) Two players *were carted off* to hospital. (OXD)

● LM RELIEVED OF THE PRESSURE EXERTED BY TR

The corpus data suggest that the semantic dimensions of the phrasal verbs *shrug off* (4) and *ease off* (5) are predominantly structured via the configuration LM RELIEVED OF THE PRESSURE EXERTED BY TR (Figure 4). Parallel to this, their meaning also derives from the metaphorical mapping GETTING RID OF OR RELIEVING THE EFFECTS OF PAIN/ILLNESS/INJURY IS RELIEVING AN ENTITY OF A PHYSICAL BURDEN. As for their specific meanings, they are mapped by means of the metonymies MEANS FOR ACTION (*shrug off*) and EFFECT FOR ACTION (*ease off*) constituting the semantic framework of their base verbs.

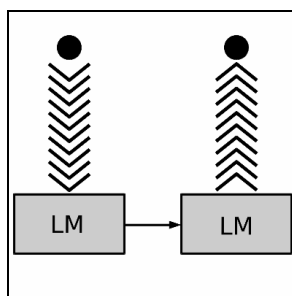


Figure 4. SC-4 – LM RELIEVED OF THE PRESSURE EXERTED BY TR

- 4) Barnes is trying to *shrug off* an ankle injury. (OXD)
- 5) The pain *eased off* after a few hours. (OXD)

● REMOVING TR FROM A PHYSICAL SURFACE (LM)

Inferring from the researched linguistic material, the abstract meaning of the phrasal verb *kill off* (6) is structured by the interplay of the underlying configuration REMOVING TR FROM A PHYSICAL SURFACE (LM) (Figure 5) and the conceptual mapping EXTERMINATION OF DISEASE AGENTS IS REMOVING OBJECTS/MATTER FROM A PHYSICAL SURFACE.

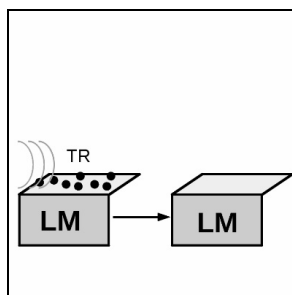


Figure 5. SC-5 – REMOVING TR FROM A PHYSICAL SURFACE (LM)

- 6) Antibiotics should *kill off* the bacteria. (OXD)

● SEPARATION OF AN INTEGRAL PART (TR) FROM THE WHOLE (LM)

In all the configurations underlying the particle *off* that have been presented so far, the trajector and the landmark are schematised as distinctly separate entities. Unlike this two-separate-entity schematisation, the next recorded configuration – SEPARATION OF AN INTEGRAL PART (TR) FROM THE WHOLE (LM) (Figure 6) – profiles a PART-WHOLE relation. In this conceptual scene, the trajector represents the *part*, whereas the landmark refers to the *whole*. As can be seen in (7), this conceptualisation is instantiated by the phrasal verb *break off*.

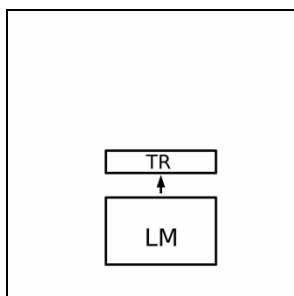


Figure 6. SC-6 – SEPARATION OF AN INTEGRAL PART (TR) FROM THE WHOLE (LM)

7) A corner of her tooth *had broken off*. (OXD)

● TR SPREADING IN ALL DIRECTIONS

The final recorded configuration underlying the semantic framework of the observed phrasal verbs with the particle *off* is TR SPREADING IN ALL DIRECTIONS (Figure 7). As shown in (8), this configuration is responsible for the semantic motivation of the phrasal verb *trigger off* through an additional metaphorical mapping ALLERGIC REACTIONS ARE EXPLOSIONS.

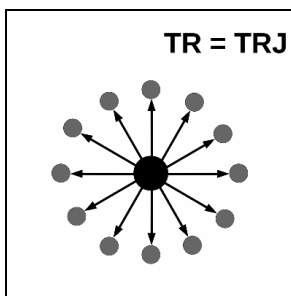


Figure 7. SC-7 – TR SPREADING IN ALL DIRECTIONS

8) Nuts *can trigger off* a violent allergic reaction. (OXD)

4.2. Phrasal verbs with the particle *up*

All the examined instances of the phrasal verbs with the particle *up* suggest that there are 6 spatial configurations underlying their semantic framework.

● TR MOVING UPWARDS RELATIVE TO THE VERTICAL AXIS (LM)

Drawing on the linguistic evidence below, it is evident that the general meaning of the phrasal verbs *throw up* (9) and *cough up* (10) is predominantly structured by the configuration TR MOVING UPWARDS RELATIVE TO THE VERTICAL AXIS (LM) (Figure 8). Their specific meanings derive from the metonymies grounded in their base verbs (MANNER OF ACTION FOR THE ACTION – *throw*, and MEANS FOR ACTION – *cough*).

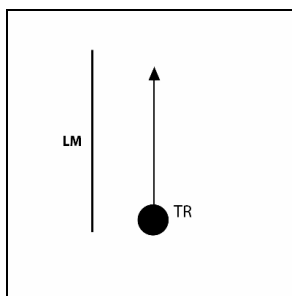


Figure 8. SC-8 – TR MOVING UPWARDS RELATIVE TO THE VERTICAL AXIS (LM)

- 9) The smell made me want to *throw up*. (OXD)
 10) He's *been coughing up* blood. (OXD)

● TR BECOMING ACCESSIBLE/VISIBLE BY MOVING UPWARDS

As can be discerned from the corpus-oriented example *wake up* (11), the spatial configuration TR BECOMING ACCESSIBLE/VISIBLE BY MOVING UPWARDS (Figure 9) profiles a conceptual scene in which a physical entity (TR) which is typically inaccessible to perception becomes accessible through an upward movement along the vertical axis (LM). The phrasal verb's meaning is further construed via the metaphor CONSCIOUS IS UP (stemming from the particle *up*) and the metonymy MANNER OF ACTION FOR THE ACTION (coming from the base verb *wake*).

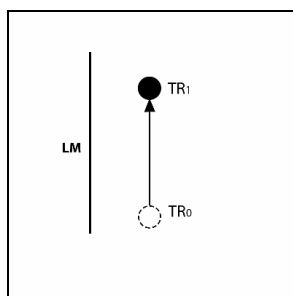


Figure 9. SC-9 – TR BECOMING ACCESSIBLE/VISIBLE BY MOVING UPWARDS

- 11) When she *woke up* after the operation, her sister was sitting beside her bed. (OXD)

● TR REACHING A GOAL (LM)

Corpus investigations demonstrate that the semantic structure of the phrasal verb *pick up* (12) is primarily motivated by the spatial configuration TR REACHING A GOAL (LM) (Figure 11). This conceptualisation is additionally triggered by the metaphorical mappings GETTING INFECTED IS BEING WITHIN PROXIMITY OR IN CONTACT

WITH THE GOAL REACHED (deriving from the particle *up*) and PICKING IS GRASPING AND TAKING (stemming from the base verb *pick*).⁹

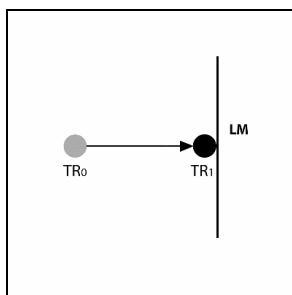


Figure 10. SC-10 – TR REACHING A GOAL (LM)

12) He *picked up* a virus at school. (OXD)

● TR INCREASING IN SIZE RELATIVE TO THE VERTICAL AXIS (LM)

From an image-schematic point of view, the phrasal verbs *swell up* (13) and *flare up* (14) are coded by means of the configuration TR INCREASING IN SIZE RELATIVE TO THE VERTICAL AXIS (LM) (Figure 10). Their meaning is further framed via the metaphorical mapping DISEASE IS FIRE (*flare up*) and the metonymic mapping MANNER OF ACTION FOR THE ACTION (*swell up*).

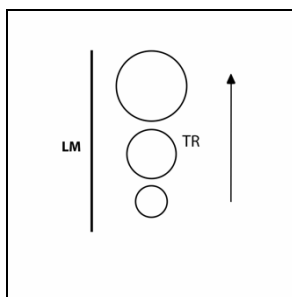


Figure 11. SC-11 – TR INCREASING IN SIZE RELATIVE TO THE VERTICAL AXIS (LM)

13) Emergency first aid may be required as the tongue *can swell up* dramatically. (BNC)

14) Are you worried about her health? Olivia: A flu like that can *flare up* if you push it too soon. Have you spoken with her today? (COCA)

● TR MOVING UPWARDS REACHING THE HIGHEST LIMIT (LM)

The spatial configuration TR MOVING UPWARDS REACHING THE HIGHEST LIMIT (LM) (Figure 12) profiles the image-schematic meaning of the phrasal verbs *build up*

⁹ The metaphor PICKING IS GRASPING AND TAKING is introduced by Morgan (1997: 339).

(15) and *dose up* (16) through the metaphorical mappings THE STATE OF HEALTH IS THE GOAL and HEALTH IMPROVEMENT IS UPWARD PHYSICAL MOTION. The phrasal verbs' specific meanings are construed via the conceptual metaphor RECOVERY IS CONSTRUCTION/BUILDING (*build up*) and the conceptual metonymy INSTRUMENT FOR ACTION (*dose up*) constituting the base verbs *build* and *dose*.

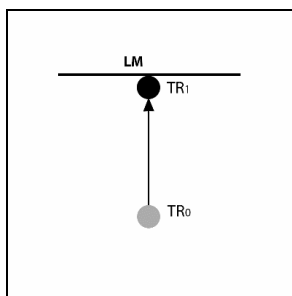


Figure 12. SC-12 – TR MOVING UPWARDS REACHING THE HIGHEST LIMIT (LM)

15) She gave me lots of vitamins and minerals *to build me up*. (OXD)

16) She *dosed him up* with aspirin and sent him to bed. (OXD)

● TR COVERING/COMPLETING LM

As can be seen from the examples below, the observed phrasal verbs *bandage up* (17) and *strap up* (18) derive their general meaning from the underlying configuration TR COVERING/COMPLETING LM (Figure 13).¹⁰ The motivation of their specific meanings is activated by the following conceptual metonymies stemming from the corresponding base verbs: OBJECT INVOLVED IN AN ACTION FOR THE ACTION (*bandage*) and MANNER OF ACTION FOR THE ACTION (*strap*).

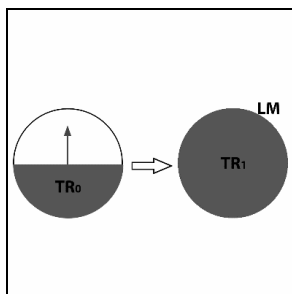


Figure 13. SC-13 – TR COVERING/COMPLETING LM

17) Joe *bandaged me up* until the doctor came. (OXD)

18) Your wrist needs *to be strapped up*. (OXD)

¹⁰ The graphic representations of the configurations TR REACHING A GOAL (LM) and TR COVERING/COMPLETING LM are modelled on Rudzka-Ostyn (2003: 77, 86).

4.3. Phrasal verbs with the particle *down*

The recorded examples of the phrasal verbs with the particle *down* point to 6 spatial configurations underlying their semantic structure.

● TR MOVING DOWNWARDS RELATIVE TO THE VERTICAL AXIS (LM)

The observed linguistic material suggests that the semantic framework of the phrasal verb *go down* (19) is construed by the interplay of the underlying configuration TR MOVING DOWNWARDS RELATIVE TO THE VERTICAL AXIS (LM) (Figure 14) and the metaphorical mappings HEALTH IS UP and SICK IS DOWN.¹¹

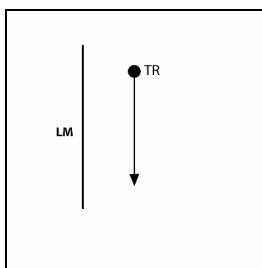


Figure 14. SC-14 – TR MOVING DOWNWARDS RELATIVE TO THE VERTICAL AXIS (LM)

19) I'm *going down* with a cold. (OXD)

● TR MOVING DOWNWARDS ALONG THE VERTICAL AXIS (LM)

The general meaning of the observed phrasal verb *go down* (20) is motivated by means of the underlying configuration TR MOVING DOWNWARDS ALONG THE VERTICAL AXIS (LM) (Figure 15) and the metaphor PAIN IS A PHYSICAL OBJECT. In contrast to the previous configuration in which the landmark represents an abstraction (the vertical axis), in this conceptual scene the landmark represents a concrete physical entity ('the human arm'). In view of the foregoing, this conceptualisation stems from the canonical position of the human arms in which these body parts naturally hang downwards at either side of the body relative to the vertical axis.

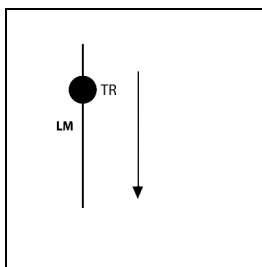


Figure 15. SC-15 – TR MOVING DOWNWARDS ALONG THE VERTICAL AXIS (LM)

20) The pain is *going down* my arm. (OXD)

¹¹ The metaphors HEALTH IS UP and SICK IS DOWN were first formulated by Lakoff and Johnson (1980: 15).

● TR FORCED DOWNWARDS RELATIVE TO THE VERTICAL AXIS (LM)

As the observed linguistic data indicate, the semantic structure of the phrasal verb *cut down* (21) is primarily motivated by means of the configuration TR FORCED DOWNWARDS RELATIVE TO THE VERTICAL AXIS (LM) (Figure 16). Further meaning construction of the given phrasal verb is activated by the conceptual metaphors PATIENTS ARE TREES and AN ILLNESS IS A CUTTING TOOL.

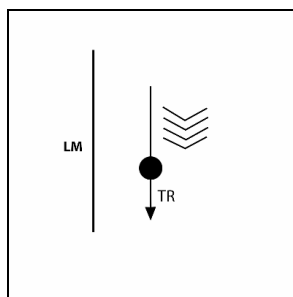


Figure 16. SC-16 – TR FORCED DOWNWARDS RELATIVE TO THE VERTICAL AXIS (LM)

21) He *was cut down* by pneumonia at an early age. (OXD)

● TR PULLED DOWNWARDS RELATIVE TO THE VERTICAL AXIS (LM)

The general meaning of the phrasal verb *pull down* (22) is coded via the spatial configuration TR PULLED DOWNWARDS RELATIVE TO THE VERTICAL AXIS (LM) (Figure 17). Unlike the previous case of conceptualisation which evokes a scene in which a physical entity is moved down the vertical axis by some external force from above, in this scene, a physical entity (TR) is pulled downwards by some external force located below the trajector. When it comes to the specific meaning of the phrasal verb, it is construed via the conceptual metonymy MANNER OF ACTION FOR THE ACTION grounded in the base verbs (*pull*).

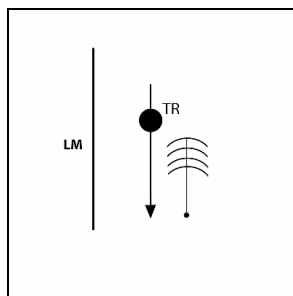


Figure 17. SC-17 – TR PULLED DOWNWARDS RELATIVE TO THE VERTICAL AXIS (LM)

22) The strain is really *pulling* me down. (OXD)

● KEEPING TR DOWN AND PREVENTING IT FROM COMING UPWARDS

The spatial configuration KEEPING TR DOWN AND PREVENTING IT FROM COMING UPWARDS (Figure 18) underlies the conceptual structure of the phrasal verb *fight down* (23). This image-schematic conceptualisation is additionally coded by the metaphorical mapping HEALING IS FIGHTING entrenched in the base verb's semantic framework (*fight*).

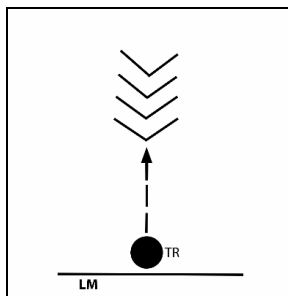


Figure 18. SC-18 – KEEPING TR DOWN AND PREVENTING IT FROM COMING UPWARDS

23) He *fought down* a rush of panic. (OXD)

● TR DECREASING IN SIZE RELATIVE TO THE VERTICAL AXIS (LM)

As the researched corpus data point out, the meaning of the phrasal verb *go down* (24) first and foremost stems from the configuration TR DECREASING IN SIZE RELATIVE TO THE VERTICAL AXIS (LM) (Figure 19). The phrasal verb's semantic structure is further framed via the metaphor A MEDICAL CONDITION IS A PHYSICAL OBJECT.

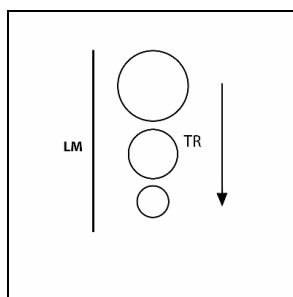


Figure 19. SC-19 – TR DECREASING IN SIZE RELATIVE TO THE VERTICAL AXIS (LM)

24) The swelling *has gone down* a little. (OXD)

4.4. Phrasal verbs with the particle *out*

The semantic investigation of the observed phrasal verbs containing the particle *out* has ascertained 4 different spatial configurations structuring their meaning.

● TR LEAVING THE BOUNDARIES OF LM

As the researched data indicate, the concrete sense of the phrasal verb *pump out* (25) is coded by the underlying configuration TR LEAVING THE BOUNDARIES OF LM (Figure 20). This conceptual scene denotes a spatial relationship between two separate concrete entities in which one entity (TR) physically leaves the boundaries of another entity (LM). By ‘joining forces’ with the conceptual metaphor UNCONSCIOUS IS OUT, this configuration also structures the abstract meaning of the phrasal verb *pass out* (26).

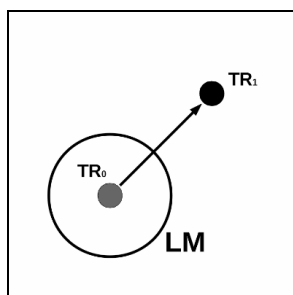


Figure 20. SC-20 – TR LEAVING THE BOUNDARIES OF LM

25) The blood was *pumping out* of the wound. (OXD)

26) He almost *passed out* with the pain. (OXD)

● PUSHING TR OUT OF LM

The semantic structure of the phrasal verb *push out* (27) is predominantly profiled by the configuration PUSHING TR OUT OF LM (Figure 21). The additional meaning construction of the given phrasal verb is achieved through the following cognitive mechanisms: the metaphors HOSPITALS ARE CONTAINERS and PATIENTS ARE CONTAINED OBJECTS underlying the particle *out* and the metonymy MANNER OF ACTION FOR THE ACTION framing the constituent verb (*push*).

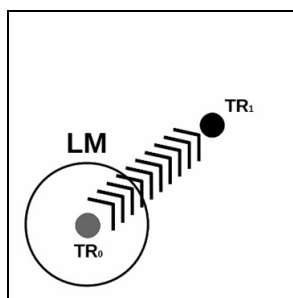


Figure 21. SC-21 – PUSHING TR OUT OF LM

27) Patients are being *pushed out* of hospital before they are really ready. (OXD)

● SEPARATION/REMOVAL OF TR FROM LM

As can be discerned from the observed linguistic evidence, the spatial configuration SEPARATION/REMOVAL OF TR FROM LM (Figure 22) structures the concrete meaning of the phrasal verb *take out* shown in (28). This conceptual scene implies a PART-WHOLE relationship and evokes of a cognitive scenario in which a body part/organ is removed from the human body.

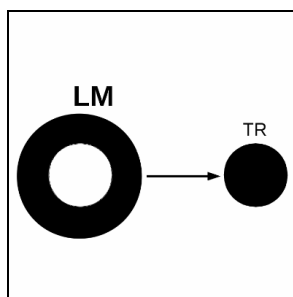


Figure 22. SC-22 – SEPARATION/REMOVAL OF TR FROM LM

(28) She had to *have* her appendix *taken out*. (OXD)

● TR SPREADING/INCREASING TO ITS MAXIMAL BOUNDARIES

Finally, the phrasal verbs *sweat out* (29) and *dry out* (30) are predominantly motivated by the configuration TR SPREADING/INCREASING TO ITS MAXIMAL BOUNDARIES (Figure 23). In contrast to the three previous configurations in which the trajector and the landmark refer to two separate entities, the cognitive topology of this spatial configuration implies one entity. In other words, the trajector and the landmark are regarded as the same entity (*reflexive trajector*).¹² The image-schematic meaning, ‘spreading/increasing to the maximal boundaries’, that these phrasal verbs share, stems from the conceptual scene in which the trajector and the landmark embody different locations of the same entity. Regarding the phrasal verbs’ specific meanings, they come from the semantic framework of the base verbs via the conceptual metaphor SOBER IS DRY (*dry*) and the conceptual metonymy RESULT FOR ACTION (*sweat*).

12 For more details, see Lindner (1981: 122) and Lakoff (1987: 400–444).

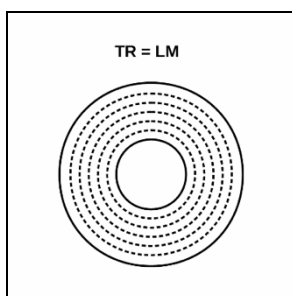


Figure 23. SC-23 – TR SPREADING/INCREASING TO ITS MAXIMAL BOUNDARIES

29) Whenever I get a bad fever, I go to bed and *sweat it out*. (OXD)

30) She went into clinic *to dry out*. (OXD)

4.5. Phrasal verbs with the particle *in*

The language data clearly indicate that there are 4 spatial configurations motivating the general meaning of the observed phrasal verbs with the particle *in*.

● TR ENTERING THE BOUNDARIES OF LM

It can be inferred from the corpus-extracted instances listed below that the spatial configuration TR ENTERING THE BOUNDARIES OF LM (Figure 24) predominantly structures the phrasal verbs *go in* (31) and *set in* (32). On the one hand, the semantic framework of *go in* is further construed by the metaphors A MEDICAL INSTITUTION IS A CONTAINER, and THE PATIENT IS A CONTAINED OBJECT. On the other hand, the meaning dimensions of *set in* are additionally extended by the metaphor PROGRESS OF A DISEASE IS THE MOTION OF AN OBJECT.¹³

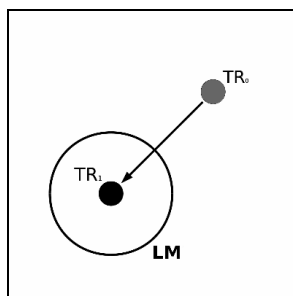


Figure 24. SC-24 – TR ENTERING THE BOUNDARIES OF LM

31) I'm *going in* on Friday for an X-ray. (OXD)

¹³ This metaphor is modelled on the cognitive scenario in which the progress, cause or outcome of disease are conceptualised as the motion, source of motion or destination of a physical object (Ruiz de Mendoza/Galera-Masegosa, 2011: 18–19)

- 32) He eventually agreed to stay in bed, but it was too late – pneumonia *had set in*. (OXD)

● TR BEING WITHIN THE BOUNDARIES OF LM

The abovementioned metaphorical mappings, A MEDICAL INSTITUTION IS A CONTAINER and THE PATIENT IS A CONTAINED OBJECT, also motivate the semantics of the phrasal verb *keep in* (33). Unlike the previous case of schematisation, here the meaning is activated by the underlying configuration TR BEING WITHIN THE BOUNDARIES OF LM (Figure 25).

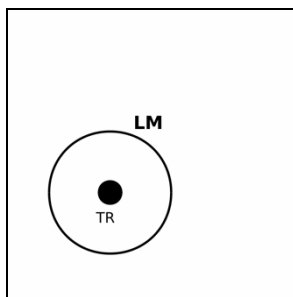


Figure 25. SC-25 – TR BEING WITHIN THE BOUNDARIES OF LM

- 33) She's much better, but they're *keeping her in* overnight. (OXD)

● PUTTING TR WITHIN THE BOUNDARIES OF LM USING FORCE

Along similar lines, the conceptual semantic dimensions of the phrasal verb *put in* (34) are also mapped by means of the metaphors A MEDICAL INSTITUTION IS A CONTAINER and THE PATIENT IS A CONTAINED OBJECT. As for the phrasal verb's primary conceptualisation, it is triggered by the configuration PUTTING TR WITHIN THE BOUNDARIES OF LM USING FORCE (Figure 26).

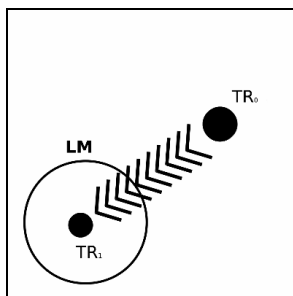


Figure 26. SC-26 – PUTTING TR WITHIN THE BOUNDARIES OF LM USING FORCE

- 34) An accident *put him in* hospital for five years. (OXD)

● LM BEING DENTED INWARDS

The three previous cases of conceptualisation indicate that the semantics of the observed phrasal verbs with the particle *in* stems from the spatial scenes in which the trajector and the landmark are regarded as separate entities. Unlike such a cognitive scenario, the phrasal verb *bash in* (35) is coded by the configuration LM BEING DENTED INWARDS (Figure 27), which evokes a significantly different conceptual scene. Here the trajector and the landmark embody different locations of the same entity (reflexive trajector). In other words, the trajector is dented inwards by some external force, resulting in the shrinkage of the trajector's form.¹⁴ Simultaneously, the metonymy MEANS FOR ACTION grounded in the base verb *bash* activates the phrasal verbs' specific meaning.

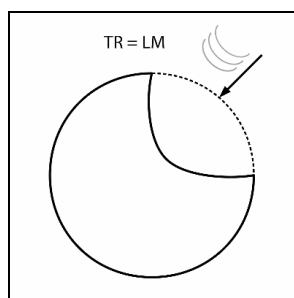


Figure 27. SC-27 – LM BEING DENTED INWARDS

- 35) You have to, Cullam." I struck a match,' the man mumbled.' Charlie's head was all *bashed in*. I turned him over and I got blood on me.' (BNC)

4.6. Phrasal verbs with the particle *on*

The linguistic evidence subjected to investigation has revealed 3 spatial configurations profiling the conceptual semantic framework of the phrasal verbs with the particle *on*.

● TR GETTING ON THE PHYSICAL SUPPORT (LM)

The spatial configuration TR GETTING ON THE PHYSICAL SUPPORT (LM) (Figure 28) is primarily responsible for the general meaning the phrasal verb *put on* (36). The semantic structure of the given lexical unit is further coded via the metaphorical mapping A MEDICAL THERAPY IS PHYSICAL SUPPORT and the metonymic mapping A DRUG FOR THE EFFECT OF THE DRUG.

¹⁴ Cf. the configuration TR SPREADING/INCREASING TO ITS MAXIMAL BOUNDARIES underlying the particle *out*.

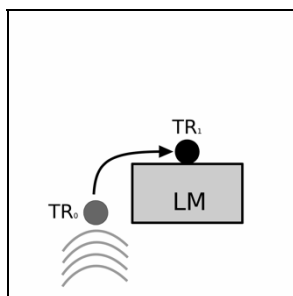


Figure 28. SC-28 – TR GETTING ON THE PHYSICAL SUPPORT (LM)

36) The doctor *put him on* antibiotics. (OXD)

● TR EXERTING PRESSURE ON LM

The corpus-oriented example shown in (37) demonstrates that the phrasal verb *take on* is first and foremost construed by means of the spatial configuration TR EXERTING PRESSURE ON LM (Figure 29). The semantic structure of *take on* is additionally profiled via the following mappings: the metaphors AVAILABLE IS ON and PATIENTS ARE PHYSICAL OBJECTS and the metonymy PATIENTS FOR WORKING PATIENTS.

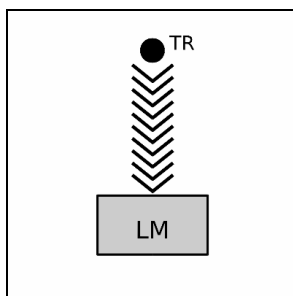


Figure 29. SC-29 – TR EXERTING PRESSURE ON LM

37) The dentist has stopped *taking on* new patients. (OXD)

● TR COMING CLOSER TO LM

Finally, as the example below indicates, the abstract sense of the phrasal verb *come on* (38) is predominantly motivated by the configuration TR COMING CLOSER TO LM (Figure 30). The further meaning extension of the given phrasal verb is activated through the metaphorical mapping ILLNESSES ARE MOVING OBJECTS.

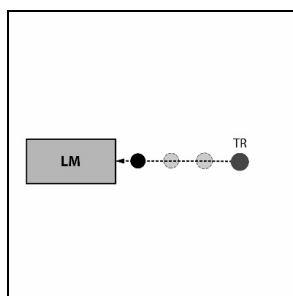


Figure 30. SC-30 – TR COMING CLOSER TO LM

38) I think I've got a cold *coming on*. (OXD)

4.7. Phrasal verbs with the particle *away*

The semantic investigation of the researched phrasal verbs with the particle *away* has revealed 3 spatial configurations structuring their meaning.

● TR MOVING AWAY FROM LM

The linguistic data demonstrate that the recorded abstract meaning of the phrasal verb *go away* (39) is structured by the interplay of the underlying configuration TR MOVING AWAY FROM LM (Figure 31) and the conceptual metaphor PAIN IS A PHYSICAL OBJECT.

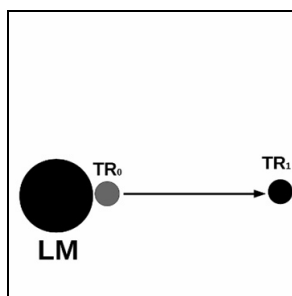


Figure 31. SC-31 – TR MOVING AWAY FROM LM

39) Jack: Tess, can you heal yourself? Make the headache *go away*? You can't, can you? (COCA)

● KEEPING/PUSHING TR AWAY FROM LM

The spatial configuration KEEPING/PUSHING TR AWAY FROM LM (Figure 32) plays a key role in structuring the meaning of the phrasal verb *keep away* (40). This primary conceptualisation is complemented by the metaphorical mapping ILLNESSES ARE PHYSICAL OBJECTS.

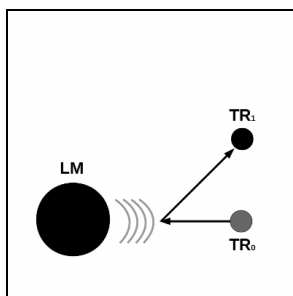


Figure 32. SC-32 – KEEPING/PUSHING TR AWAY FROM LM

40) A healthy diet can help *to keep* colds and flu *away*. (OXD)

● TR DECREASING IN SIZE AND DISAPPEARING

Particularly interesting is the spatial configuration TR DECREASING IN SIZE AND DISAPPEARING (Figure 33), which frames the phrasal verb *waste away* (41). This conceptual scene suggests that the loss of the ‘muscle mass’ is construed as the change of shape of a single physical entity (reflexive trajector).¹⁵ In other words, the mass of a physical entity (‘arm muscle’) decreases in size and potentially disappears.

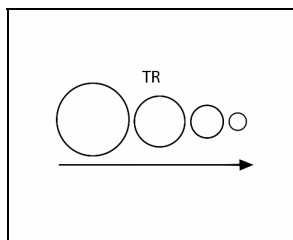


Figure 33. SC-33 – TR DECREASING IN SIZE AND DISAPPEARING

41) The muscles in her arm *had wasted away*. (OXD)

4.8. Phrasal verbs with the particle *through*

When it comes to the observed phrasal verbs with the particle *through*, the language data suggest there are 2 spatial configurations construing their meaning.

● TR MOVING THROUGH LM FROM END TO END

The linguistic data selected for analysis demonstrate that the configuration TR MOVING THROUGH LM FROM END TO END (Figure 34) predominantly structures the conceptual framework of the phrasal verbs *cut through* (42). This image-schematic conceptualisation is further complemented by the metaphorical mapping PAIN IS A MOVING OBJECT.

¹⁵ Cf. the configurations TR SPREADING/INCREASING TO ITS MAXIMAL BOUNDARIES (the particle *out*) and LM BEING DENTED INWARDS (the particle *in*).

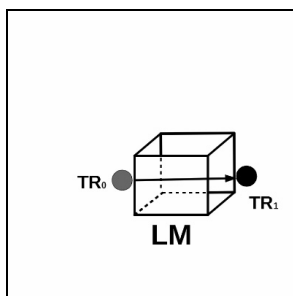


Figure 34. SC-34 – TR MOVING THROUGH LM FROM END TO END

42) The pain *cut through* him like a knife. (OXD)

● TR MOVING THROUGH AN OBSTACLE COURSE (LM) FROM END TO END

Along slightly different conceptualisation lines, the configuration TR MOVING THROUGH AN OBSTACLE COURSE (LM) FROM END TO END (Figure 35) first and foremost codes the phrasal verbs *get through* (43) and *live through* (44). Their meaning is further construed via the metaphors A MEDICAL TREATMENT/RECOVERY IS PHYSICAL MOTION and ILLNESSES ARE OBSTACLES.

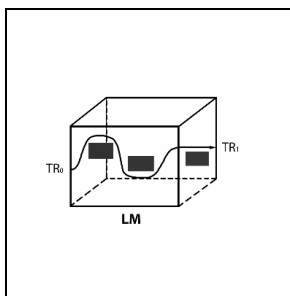


Figure 35. SC-35 – TR MOVING THROUGH AN OBSTACLE COURSE (LM) FROM END TO END

43) I thought all my bones were broken, but it was only bad bruising and swelling. I thought I'd *got through* the trauma, but as the days passed, I started to feel constantly thirsty. (BNC)

44) One child was dead (Cheryl). One child (Christie) had defied the odds and *lived through* profound blood loss, heart stoppage and delicate surgery. (COCA)

4.9. Phrasal verbs with the particle *over*

The semantic exploration of the phrasal verbs with the particle *over* has detected 2 spatial configurations grounded in their conceptual framework.¹⁶

¹⁶ The graphic representations of these two configurations are borrowed from Lakoff (1987: 422, 429).

● TR TRACING A PATH ASCENDING TO THE HIGHEST POINT THEN DESCENDING

The example shown in (45) demonstrates that the phrasal verb *get over* is structured by the interplay of the underlying configuration TR TRACING A PATH ASCENDING TO THE HIGHEST POINT THEN DESCENDING (Figure 36) and the metaphorical mappings HEALING PROCESS IS PHYSICAL MOTION and DISEASES ARE OBSTACLES.

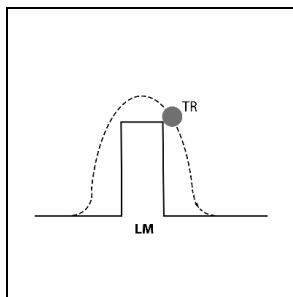


Figure 36. SC-36 – TR TRACING A PATH ASCENDING TO THE HIGHEST POINT THEN DESCENDING

45) I'm still *getting over* my cold. (OXD)

● TR MOVING ALONG THE PATH GRADUALLY COVERING LM

Corpus investigations show that the configuration TR MOVING ALONG THE PATH GRADUALLY COVERING LM (Figure 37) primarily structures the image-schematic meaning of the phrasal verb *check over* (46). This primary conceptualisation is further complemented by the metaphorical mapping MEDICAL EXAMINATION IS PHYSICAL MOTION.

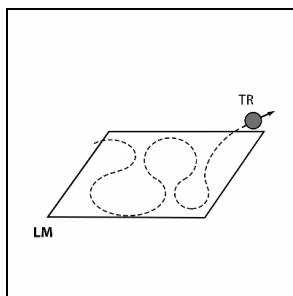


Figure 37. SC-37 – TR MOVING ALONG THE PATH GRADUALLY COVERING LM

46) The doctor would like to *check you over*. (OXD)

4.10. Phrasal verbs with the particle *into*

Insights into the semantics of the observed phrasal verbs containing the particle *into* have revealed 2 spatial configurations constituting conceptual framework: TR ENTERING THE BOUNDARIES OF LM and PUTTING TR WITHIN THE BOUNDARIES OF LM USING FORCE. Here it should be noted that these two configurations underlying the particle *into* fully overlap with two previously discussed configurations structuring the particle *in* (TR ENTERING THE BOUNDARIES OF LM and PUTTING TR WITHIN THE BOUNDARIES OF LM USING FORCE).

Inferring from the corpus-based examples, the underlying configuration TR ENTERING THE BOUNDARIES OF LM (Figure 38) motivates the semantic dimensions of the phrasal *go into* (47) by ‘joining forces’ with the metaphors A MEDICAL INSTITUTION IS A CONTAINER and THE PATIENT IS A CONTAINED OBJECT. The same configuration also structures the phrasal verb *slip into* (48), supported by a set of metaphorical and metonymic mappings: A MEDICAL CONDITION IS A CONTAINER, PERSON FOR THE PERSON’S METAL STATE and MANNER OF ACTION FOR THE ACTION.

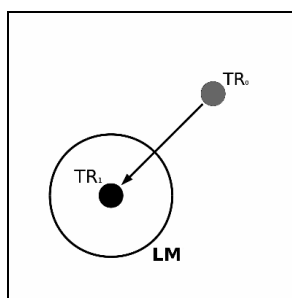


Figure 38. SC-38 – TR ENTERING THE BOUNDARIES OF LM

47) When is Cara *going into* hospital? (OXD)

48) The patient *slipped into* coma. (OXD)

● PUTTING TR WITHIN THE BOUNDARIES OF LM USING FORCE

The linguistic evidence listed below suggests the conceptual dimensions of the phrasal verbs *take into* (49) are construed by the interplay of the underlying configuration PUTTING TR WITHIN THE BOUNDARIES OF LM USING FORCE (Figure 39) and the metaphors A MEDICAL INSTITUTION IS A CONTAINER and THE PATIENT IS A CONTAINED OBJECT.

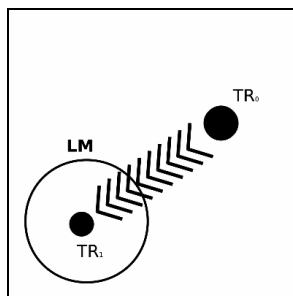


Figure 39. SC-39 – PUTTING TR WITHIN THE BOUNDARIES OF LM USING FORCE

49) The dad *was taken* into hospital. (OXD)

4.11. Phrasal verbs with the particle *round*

The observed language material suggests that there are 2 spatial configurations motivating the semantics of the phrasal verbs with the particle *round*.

- TR MOVING ALONG A CIRCULAR PATH TO THE POINT OF DEPARTURE (LM)

As can be seen from the example below (50), the phrasal verb *come round* is primarily coded via the configuration TR MOVING ALONG A CIRCULAR PATH TO THE POINT OF DEPARTURE (LM) (Figure 40). This general meaning is further framed by the metaphors REGAINING CONSCIOUSNESS IS CIRCULAR MOTION and MENTAL STATE IS A PHYSICAL OBJECT. As for the phrasal verb's specific meaning, it is a result of the metonymy MANNER OF ACTION FOR THE ACTION stemming from the base verb (*come*).

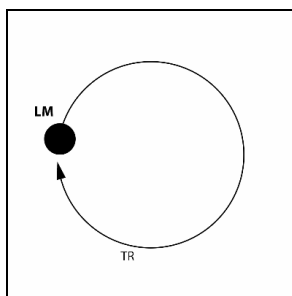


Figure 40. SC-40 – TR MOVING ALONG A CIRCULAR PATH TO THE POINT OF DEPARTURE (LM)

50) He *hasn't yet come round* after the anaesthetic. (OXD)

- TR FORCED ALONG A CIRCULAR PATH TO THE POINT OF DEPARTURE (LM)

The metaphors REGAINING CONSCIOUSNESS IS CIRCULAR MOTION and MENTAL STATE IS A PHYSICAL OBJECT also structure the meaning of the phrasal verb *bring round* (51). Unlike the abovementioned case, here the cognitive scenario is modelled on the element of 'external force', stemming from the underlying configuration TR

FORCED ALONG A CIRCULAR PATH TO THE POINT OF DEPARTURE (LM) (Figure 41). The phrasal verb's specific meaning derives from the base verb (*bring*) via the metonymy MANNER OF ACTION FOR THE ACTION.

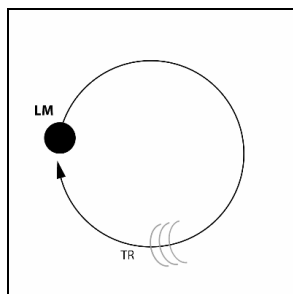


Figure 41. SC-41 – TR FORCED ALONG A CIRCULAR PATH TO THE POINT OF DEPARTURE (LM)

51) She gently slapped his face *to bring him round*. (OXD)

4.12. Phrasal verbs with the particle *onto*

● TR HOLDING ONTO LM

The configuration TR HOLDING ONTO LM (Figure 42) is first and foremost responsible for the meaning construction of the phrasal verb *latch onto* (52). This primary conceptualisation is additionally supported by the following mappings: the metaphors PATHOGENS ARE MOVING OBJECTS and CAUSING INFECTION IS LATCHING ONTO A PHYSICAL OBJECT and the metonymy MANNER OF ACTION FOR THE ACTION (*latch*).

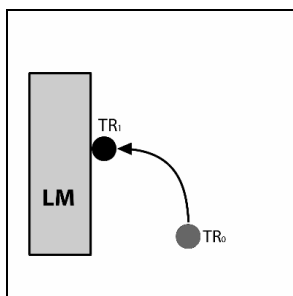


Figure 42. SC-42 – TR HOLDING ONTO LM

52) The virus *latched onto* the red blood cells. (OXD)

4.13. Phrasal verbs with the particle *back*

● TR RETURNING TO AN EARLIER LOCATION/POSITION

The spatial configuration TR RETURNING TO AN EARLIER LOCATION/POSITION (LM) (Figure 43) has the key role in the semantic motivation of the phrasal verb *come back* (53). Parallel to this, the metaphors HEADACHE IS A MOVING OBJECT and PAST

ILLNESS IS AN EARLIER LOCATION trigger the further meaning construction of the given phrasal verb.

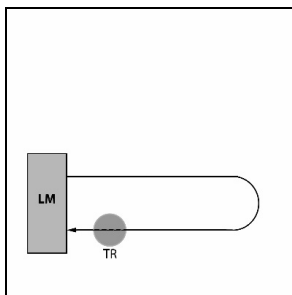


Figure 43. SC-43 – TR RETURNING TO AN EARLIER LOCATION/POSITION

53) My headache *has come back* again. (OXD)

4.14. Phrasal verbs with the particle *at*

● TR HEADING TOWARDS AND REACHING THE GOAL (LM)

The observed linguistic evidence demonstrates that the spatial configuration TR HEADING TOWARDS AND REACHING THE GOAL (LM) (Figure 44) predominantly codes the semantic structure of the phrasal verb *look at* (54). The specific meaning of the given phrasal verb is additionally framed via the metaphor MEDICAL EXAMINATION IS LOOKING, which is entrenched in the base verb *look*.

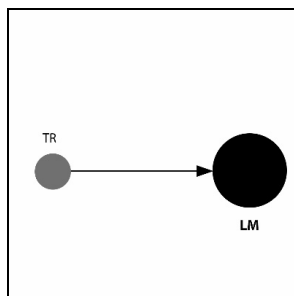


Figure 44. SC-44 – TR HEADING TOWARDS AND REACHING THE GOAL (LM)

54) I'd like the doctor *to look at* him. (OXD)

4.15. Phrasal verbs with the particle *against*

● TR POSITIONED AGAINST LM

The image-schematic meaning of the phrasal verb *guard against* (55) comes from the spatial configuration TR POSITIONED AGAINST LM (Figure 45). The specific meaning of this lexical unit is construed via the metaphors A DISEASE IS AN ATTACKER and AN ORGANISM IS A TARGET, structuring the constituent verb *guard*.

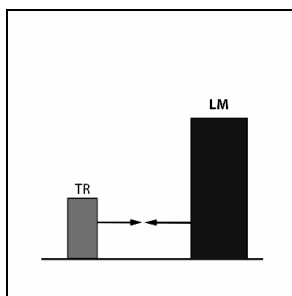


Figure 45. SC-45 – TR POSITIONED AGAINST LM

55) Regular exercise can help to *guard against* heart disease. (OXD)

4.16. Phrasal verbs with the particle *from*

● LM AFFECTED BY TR SPREADING ALONG THE TRAJECTORY

The corpus data indicate that the spatial configuration LM AFFECTED BY TR SPREADING ALONG ITS TRAJECTORY (Figure 46) motivates the semantic structure of the phrasal verb *suffer from* (56). This conceptualisation is modelled on the following scenario: a human being (landmark) is affected by an illness (trajector) which spreads along and overlaps with the path of movement (trajector = trajectory). The phrasal verb's specific meaning is framed through the metonymic mapping MANNER OF ACTION FOR THE ACTION grounded in the constituent verb *suffer*.

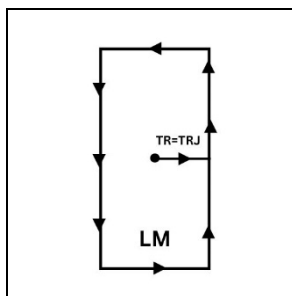


Figure 46. SC-46 – LM AFFECTED BY TR SPREADING ALONG THE TRAJECTORY

56) He *suffers from* fever. (OXD)

4.17. Phrasal verbs with the particle *under*

● PUTTING/PLACING TR UNDER A SURFACE (LM)

As the example shown in (57) points out, the semantic framework of the phrasal verb *put under* ('making a patient unconscious before a medical operation') is structured by means of the configuration PUTTING/PLACING TR UNDER A SURFACE (LM) (Figure 47). This primary conceptualisation is further complemented by the metaphorical mapping UNCONSCIOUS IS UNDER.

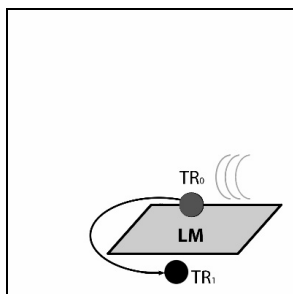


Figure 47. SC-47 – PUTTING/PLACING TR UNDER A SURFACE (LM)

57) I'm afraid we'll need to *put* you *under* for the operation. (OXD)

4.18. Phrasal verbs with the particle *together*

● BROKEN PARTS (TR) BECOMING THE WHOLE AGAIN

Finally, the conceptual semantic framework of the phrasal verb *knit together* (58) is predominantly structured via the configuration BROKEN PARTS (TR) BECOMING THE WHOLE AGAIN (Figure 48) (reflexive trajector).¹⁷ The phrasal verb's specific meaning is metaphorically extended by means of the conceptual mapping HEALING IS KNITTING grounded in the base verb *knit*.

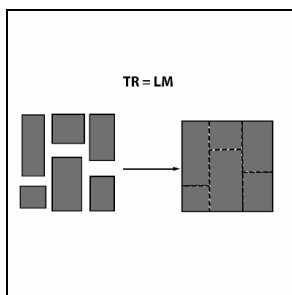


Figure 48. SC-48 – BROKEN PARTS (TR) BECOMING THE WHOLE AGAIN

58) The ribs are broken, but they'll *knit together*. (OXD)

5. Concluding remarks

The research indicates the observed phrasal verbs in the domain of HEALTHCARE/MEDICINE manifest a high degree of cognitive salience. Cognitive salience results from different conceptual mechanisms which structure the meaning of the explored lexical units, such as image-schematic transformations which activate spatial schematisation via spatial configurations grounded in the semantic framework

¹⁷ Cf. the configurations TR SPREADING/INCREASING TO ITS MAXIMAL BOUNDARIES (*out*) and LM BEING DENTED INWARDS (*in*) and TR DECREASING IN SIZE AND DISAPPEARING (*away*).

of the constituent particles and various metaphorical and metonymic mappings structuring both the constituent verbs and the constituent particles. In other words, these cognitive mechanisms are responsible for construing the general and specific meanings of the observed phrasal verbs.

On the one hand, general meaning of the phrasal verbs under exploration primarily stems from the image-schematic structures underlying the constituent particles. These are instantiated via different spatial configurations, such as: (1) TR LEAVING THE BOUNDARIES OF LM – Blood was *pumping out* of my wound (OXD), (2) TR GETTING OFF THE PHYSICAL SUPPORT (LM) – The doctor *took him off* tranquilizers (OXD), (3) KEEPING/PUSHING TR AWAY FROM LM – The tablets should help *take the pain away* (OXD), (4) TR COMING CLOSER TO LM – I think I've got a cold *coming on* (OXD), (5) TR RETURNING TO AN EARLIER LOCATION/POSITION (LM) – Children often seem to *bounce back* from illness more quickly than adults do (OXD), etc. Overall, 48 different spatial configurations profiling 109 meanings of 105 observed phrasal verbs have been detected: *off* (7 configurations), *up* and *down* (6 configurations), *out* and *in* (4 configurations), *on* and *away* (3 configurations), *through*, *over*, *into* and *round* (2 configurations), and *onto*, *back*, *at*, *against*, *from*, *under* and *together* (1 configuration). Furthermore, it is evident that the spatial configurations play the key role in structuring their concrete senses – e.g. *take out* is primarily motivated by the configuration SEPARATION/REMOVAL OF TR FROM LM (She had to *have her appendix taken out* (OXD)). As for the phrasal verbs' abstract senses, their meaning dimensions are first and foremost coded by the underlying configurations and are further extended via conceptual mappings entrenched in the constituent particle. Thus, for example, the configuration TR LEAVING THE BOUNDARIES OF LM structures the phrasal verb *pass out* via the metaphorical mapping UNCONSCIOUS IS OUT (cf. He almost *passed out* with the pain. (OXD)).

On the other hand, the specific meanings of analysed phrasal verbs result from the conceptual metaphors and conceptual metonymies construing semantic dimensions of the constituent/base verbs. For instance, the following abstract meaning of the phrasal verb *flare up* is construed via the metaphor DISEASE IS FIRE (cf. Are you worried about her health? Olivia: A flu like that can *flare up* if you push it too soon. Have you spoken with her today? (COCA)). Similarly, the following abstract meaning of *keep down* is motivated by the metaphor HEALING IS FIGHTING (cf. He *fought down* a rush of panic. (OXD)). When it comes to conceptual metonymies, the research results suggest that these mechanisms activate a considerable number of the phrasal verbs' specific meanings: MANNER OF ACTION FOR THE ACTION (e.g. Emergency first aid may be required as the tongue *can swell up* dramatically. (BNC)), MEANS FOR ACTION (e.g. Barnes is trying to *shrug off* an ankle injury (OXD)), INSTRUMENT FOR ACTION (Two players were *carted off* to hospital (OXD)), OBJECT INVOLVED IN AN ACTION FOR THE ACTION (Joe *bandaged me up* until the doctor came (OXD)), RESULT FOR ACTION (e.g. Whenever I get a bad fever, I go to bed and *sweat it out* (OXD)) and EFFECT FOR ACTION (The pain *eased off* after a few hours (OXD)). Here the conceptual metonymy MANNER OF ACTION FOR THE ACTION has the most active role in their meaning extension.

The cognitive semantic approach to the study of phrasal verbs employed in this paper has once again demonstrated a huge potential for tackling their polysemy. For example, the polysemic nature of three different (yet related) senses of the observed phrasal verb *go down* can be explained by the activation of three different spatial configurations stemming from the particle *down*: (1) TR MOVING DOWNWARDS RELATIVE TO THE VERTICAL AXIS (LM) (*I'm going down with a cold* (OXD)), (2) TR MOVING DOWNWARDS ALONG THE VERTICAL AXIS (lm) (*The pain is going down my arm* (OXD)) and (3) TR DECREASING IN SIZE RELATIVE TO THE VERTICAL AXIS (LM) (*The swelling has gone down a little* (OXD)).

In conclusion, it can be said that the cognitive approach, applied in the analysis of this specific lexical-semantic segment of language, has significantly contributed to the decoding of the complex semantic dimension of the English HEALTHCARE/MEDICINE-related phrasal verbs. Nevertheless, this study is limited to a specific lexical-semantic segment, the English phrasal verbs typically used in the language of healthcare and medicine. Still, the findings may be applicable in future semantic analyses of other same/similar linguistic units, either intralinguistically (e.g. the investigation of English phrasal verbs or idioms belonging to another conceptual domain) or interlinguistically (e.g. a contrastive phrasal verb and prefixed verb analysis in Germanic and Slavic languages). In a broad sense, this paper may serve as a solid basis for further exploration of the intricate relationship formed between linguistic and extralinguistic dimensions that inhabit the human mind.

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Сажетак

ЕНГЛЕСКИ ФРАЗНИ ГЛАГОЛИ У ДОМЕНУ ЗДРАВСТВА/МЕДИЦИНЕ: КОГНИТИВНОСЕМАНТИЧКА АНАЛИЗА

Овај рад бави се појмовно-семантичком анализом енглеских фразних глагола у домену здравства/медицине на основу теоријских постулата когнитивне семантике. Главни циљ ове студије је испитивање значењске структуре посматраних лексичких јединица из угла њихове појмовне природе и когнитивне утемељености. Аутор тежи да утврди и анализира појмовне алате (когнитивне механизме) који мотивишу значењску структуру испитиваних фразних глагола. У тексту се разматра семантичка мотивисаност енглеских фразних глагола у домену здравства/медицине, при чему се бројни когнитивни механизми истичу као одговорни за

конструисање значења горенаведених лексичких јединица. У том смислу, испитује се појмовно-значењски оквир саставних партикула са нагласком на подлежне просторне конфигурације за које се тврди да су кључне за мотивисаност значења. Такође, истражује се и семантичка структура саставних глагола и издавају се различите појмовне метафоре и метонимије за које аутор сматра да су заслужне за даља проширења значења. Заједно посматрано, горепоменуте тврдње доприносе јаснијем осветљавању значењских димензија анализираних фразних глагола. У раду аутор примењује теоријско-методолошке поставке когнитивне лингвистике у анализи значења енглеских фразних глагола у домену здравства/медицине. Језичка грађа за ово истраживање (105 фразних глагола са 18 различитих саставних партикула и 109 различитих значења) примарно се заснива на референтном специјализованом речнику енглеских фразних глагола и допуњена је грађом преузетом из два референтна електронска корпуса енглеског језика. Одабрана језичка грађа испитује се применом квалитативне когнитивносемантичке анализе. Резултати истраживања сугеришу да обе саставне компоненте (основни глагол и партикула) које сачињавају фразни глагол доприносе укупном значењу фразних глагола који су предмет ове студије. Код свих посматраних фразних глагола, забележене су две различите врсте значења: опште значење које извире из сликовносхематске структуре партикуле (посредством подлежаћих просторних конфигурација), и специфично значење које се конструише посредством појмовних метафора и појмовних метонимија које структурирају основни глагол. Аутор рада закључује да је значење испитиваних фразних глагола когнитивно утемељено у високом степену, и да је значењску структуру фразних глагола могуће објаснити на основу когнитивних механизма који профилишу њихов појмовни оквир. Овај рад пружа значајан увид у мотивисаност значења енглеских фразних глагола у домену здравства/медицине. Главни допринос ове студије односи се на утврђивање и формулисање великог броја различитих просторних конфигурација, појмовних метафора и појмовних метонимија које структурирају и мотивишу значењски оквир посматраних лексичких јединица. Коначно, овај рад истиче и наглашава дубоку и сложену повезаност језика, света појмова и сазнања.

Кључне речи:

фразни глаголи, домен здравства/медицине, когнитивна анализа, концептуализација, сликовне схеме, просторне конфигурације, појмовна метафора, појмовна метонимија