

ON THE LEXICOGRAPHIC TREATMENT OF VERBS IN ENGLISH-SERBIAN TERMINOLOGICAL DICTIONARIES

*Predrag Novakov, Faculty of Philosophy, University of Novi Sad
predrag.novakov@ff.uns.ac.rs*

*Mira Milić, Faculty of Sport and Physical Education, University of Novi Sad
miramilicns@gmail.com*

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Abstract: The paper investigates the place of verbs within the terminological system of bilingual English-Serbian dictionaries, focusing on those authored by field specialists. The method is a corpus-based contrastive analysis of an English-Serbian waste management dictionary with about 1900 terms, which builds on the research results so far, as well as the preliminary quantitative analysis of three English-Serbian dictionaries, all authored by field professionals, according to which nouns dominate, while those for verbs make a much smaller count. Since the corpus findings in this research also indicate an uneven coverage of word classes in favor of nouns, the paper discusses the need to provide more room for verbs in bilingual English-Serbian dictionaries. In that respect, the paper discusses entries labelled as nouns and adjectives in the corpus, but derived from verbs and argues that specialized dictionaries should be organized in such a way to include entries for the verbs from which these nouns and adjectives were derived.

Keywords: terminology, specialized lexicography, verbs, English, Serbian, waste management

1. INTRODUCTORY REMARKS

This research explores the lexicographic treatment of verbs in English-Serbian terminological dictionaries authored by field specialists, which is the predominant practice in this environment. Complying with the generally accepted linguistic approach to terminology, this research deals with the position of the verb in the terminological system and its treatment in English-Serbian dictionaries. Due to the concept-based focus of terminology analyses, the research so far generally indicates that nouns are predominant units of the terminological system (Cabr  1999, Gortan-Premk 2004; Milić 2015; L'Homme 2020, 16). The same disbalance is found in terminological dictionaries since they are based on corpus analysis of a particular specialized field. However, looking at the matter from the aspect of the user-focused theory of functions (Fuertes-

Olivera and Tarp 2014), according to which a dictionary should be profiled according to lexicographically-relevant user needs and user situations (cognition, production, reception, translation, operation, interpretation, etc.), underrepresentation of non-nominal entries is likely to give rise to unsatisfactory production and learning outcomes within the context of Language for Specific Purposes (further LSP), predominantly English for Specific Purposes (further ESP). Therefore, knowledge acquired during the teaching process within ESP is both productive and receptive. When it comes to vocabulary, as Vela (2014, 293-294) points out, in addition to receptive, learners should also acquire productive knowledge, which in ESP implies a creative use of professional terminology.

With this in mind, this paper aims to prove that verbs as a grammatical class should be given more room in bilingual dictionaries (provided a relevant confirmation is found in the corpus) because of the significance of verbs when it comes to the productive use of professional terminology. This bears special emphasis when dealing with different types of languages. In particular, the presentation of entries for verbs in specialized terminological dictionaries in English and Serbian may vary, because we are dealing with languages that imply certain typological differences reflected in the predominant analytic or synthetic expression of lexical and grammatical concepts. Bringing to mind the incessant linguistic dominance of English, especially in terminology, this issue gains in importance if the dictionary is looked upon as a potential ESP teaching resource in the function of achieving good productive outcomes of the English language. To corroborate the need for giving more room to verbs in English-Serbian terminological dictionaries, a preliminary analysis is performed on the verbal lexical inventory of three dictionaries, all authored by field specialists, which is followed by a corpus-based analysis of the lexical inventory of an online English-Serbian dictionary of waste management terms, further referred to as ESDWM. The exposition is organized into four sections. Following the Introduction, the further exposition deals with the theoretical background of research in Section 2. The third section introduces the method of research followed by an analysis of the corpus. Finally, the fourth section summarizes the substantial findings of this research.

2. THEORETICAL FRAMEWORK

This research essentially belongs to specialized lexicography, but it also draws on the findings of lexicographic theory, as well as contact linguistics, since it is based on the proven hypothesis that Serbian terms, i.e., lexical units in specialized terminological dictionaries are predominantly created by adaptation of their English counterparts at the level of form and content (Milić 2015).

The contact linguistics aspect of a bilingual terminological dictionary is twofold. Firstly, it draws on the current linguistic approach to terminology

according to which terms are understood as lexical units with specialized meanings (L'Homme, 2005; Milić 2015). Secondly, it is conceived within the framework of the global linguistic dominance of English (cf. Filipović, 1986; Bugarski, 1996; Furiassi, Pulcini, & González, 2012; Prčić, 2018), as already mentioned above. Accordingly, a terminological dictionary is looked upon not only as a means of facilitating understanding of English texts but also as one providing relevant information concerning correctly adapted English-based units in Serbian. With this in mind, it is expected that terminological dictionaries be in function of honing the English-Serbian contact linguistic skills in the field of a particular register (cf. Milić, Glušac and Kardoš 2018). In this light, a terminological dictionary is not only a reference source that represents English and Serbian terms of a particular register but it is also a supplementary teaching tool for developing English-Serbian contact linguistic competence, which is “a type of linguistic knowledge related to the use of elements, i.e., words and names, from English as the nativized foreign language in a non-English language that regularly comes into contact with it” (Prčić, 2014, 147 – 150). A recent research into dictionary use in teaching ESP at tertiary level in this environment conducted on the sample of 726 students in 2018 has shown that “it is necessary to: intensify effort in compiling quality terminological products; foster dictionary culture; provide timely information on new quality dictionaries; organize systematic training in dictionary use through the process of education; and integrate dictionaries in task-based class activities” (Milić, Sadri, Glušac 2019, 57). According to Glušac and Milić (2021), such a goal could be realized by a more frequent and more skillful use of dictionaries in institutionalized and autonomous ESP learning alike, even though the findings testify to the fact that terminological dictionaries are the least frequently used ones in academic ESP learning (Glušac and Milić 2021). This might be interpreted in two ways. Users are not adequately informed of the existing dictionaries, or the dictionaries are not trustworthy sources of information. Whatever the reason, the fact is that terminological dictionaries should be paid more attention to both from the point of lexicographical theory and the functional profile of the dictionary. Overall, the area of dictionary use in general bears special importance in the era of the digital revolution and millennials as dictionary users that is still in urgent need of more research (Knežević et al. 2021).

Building on the increasing need for achieving a good command of English, especially the register of a particular field, this research aims to argue that bilingual terminological dictionaries should be organized in such a way as to include entries for the verbs used as base forms of entries derived from them. Notwithstanding the fact that terms can be nouns, adjectives, verbs, and adverbs, Cabré (1999, 36) finds that nouns represent two-thirds of all terms. However, Gortan-Premk (2004, 121) claims that it is not only nouns that predominate but also verbs even though to a lesser. Along the same lines,

L'Homme (2020, 16) says "Even in cases where activity concepts (linguistically expressed by nouns or verbs) or property concepts (prototypically expressed by adjectives) need to be taken into account, nouns are still preferred." Overall, on the one hand, there is a conceptual framework according to which verbs are the second predominant class of terms that lags significantly behind that of nouns, whereas on the other, there is a lexicographic product in which it is difficult to draw a clearcut division between terms and general lexical units. The former favors nouns and the latter are tailored by the current user needs that define the functional profile of a terminological dictionary. Assuming the dictionary is to fulfill the productive function, the inclusion of borderline terminological entries becomes justified. Even though this paper does not deal with morphosyntactic classes other than verbs, it is worth mentioning that recent user-oriented research has even highlighted the need for giving more room to the so-far neglected grammatical class of prepositions in terminological dictionaries (Nielsen & Fuertes-Olivera, 2009).

Focusing on the position of the verb in the terminological dictionary, an argument for giving increased consideration to verbs is the fact that there are terms that designate processes taking the linguistic form of nominalized verbs, i.e., gerunds that figure as derivational forms of non-included infinitives. The same is true of past and present participles used as adjectives. Another argument in favor of a more accurate representation of verbal entries in specialized lexicography is the fact that "they can simply be used during the analysis of noun terms to support semantic distinctions or build conceptual classes" (L'Homme, 2002). Thus, even though verbs "could not be fully captured in a conceptual structure (L'Homme, 2020, 28), they do belong to LSP and should be given more accurate treatment in terminological dictionaries (cf. Williams & Millon, 2010; López Ferrero, 2011), especially the ones aimed for, among others, the productive function.

2.1. General Lexical Entries for Verbs

Verbs represent a part of speech that carries the predication and has a primary role in the structuring of the communicational content of the message. Therefore, verbs are particularly significant for the productive function of ESP dictionaries, not just comprehension of professional terminology. It has already been mentioned (Cabré, 1999) that nouns typically dominate in specialized terminological dictionaries because they represent concepts, while verbs denote processes and states around which the noun phrases (and possibly adverbials) cluster with the verb's argument structure. Even though the nominal elements are probably the most frequent units in communication, one could assume that the verb's entries in an ESP terminological dictionary should include additional linguistic information, both morphological and syntactic (cf. L'Homme, 2020).

Thus, entries for verbs in dictionaries may help to reach productive communication competence, particularly if one bears in mind the complexity of this learning process which (among other things) implies the acquisition of the appropriate patterns (Vela 2014, 294) or morphosyntactic structures related to the professional terms presented in the dictionary. To enable a productive use of English lexical verb entries, terminological dictionaries should specify morphological information as well as the syntactic components a given verb requires. As far as the morphological segment is concerned, both general and specialized dictionaries list irregular forms (past tense, past participle); syntactic components primarily relate to complementation and collocations.

However, even though terms are lexemes with grammatical characteristics of the general lexical units, research work on the treatment of grammatical information in specialized terminological dictionaries is rather scant (cf. Bergenholtz & Kaufmann, 1997; Nielsen & Fuertes-Olivera, 2009).

In light of the above, the following analysis of ESDWM waste management lexical entries in English and Serbian will prove that *-ing* (present participle and gerund) and past participle lexical entries in a terminological dictionary should be preceded by and cross-referenced to infinitive forms of their verb bases, which is justified by user needs for a more productive use of professional terminology.

2.2 Terminological Lexical Entries for Verbs

Given that the authors of terminological dictionaries in the Serbian-speaking environment are predominantly field specialists, lexicographical description is rather deficient. This concerns not only the morphosyntactic status of lexical entries but also the adaptation of terms from the source language (predominantly English) in Serbian at the level of form and content, as well as the dictionary macrostructure and microstructure. Concerning the latter, there are no morphosyntactic criteria for entries whereas microstructure typically includes only lexical entries, i.e., English terms, and translation equivalents. Focusing on the fact that the subject of this research is the verb, it can generally be said that this morphosyntactic class is either underrepresented or overrepresented. To illustrate, the number of verbs in terminological dictionaries compiled by field specialists amounts to 2 (0.81%) of 476 terms (Milićević 1996), 1,320 (12%) of 11,000 (Stojković 2011) and 1063 (21.38%) of 4970 (Cvejić 2008). What makes the problem even more complex is the fact that English nouns and verbs sharing the same form are predominantly represented as single entries, so that the only disambiguation elements are translation equivalents.

3. RESEARCH AND METHODOLOGY

Building on the hypothesis that verbs are underrepresented or inadequately described in English-Serbian terminological dictionaries compiled by field

specialists, which has been put forward in Sub-section 2.2, the following research step is focused on a contrastive corpus-based analysis of waste management terms in English and Serbian included in the ESDWM, which is, to our opinion, a typical bilingual terminological dictionary in this environment, in terms of being predominantly authored by field specialists with very little engagement of linguists let alone lexicographers. In terms of typology (cf. Zgusta, 1971), the ESDWM belongs to the class of specialized bilingual dictionaries, since the entries are waste management terms in English and Serbian; according to the methodology of lexical processing it is descriptive, as it provides phonological and some grammatical information of entries, as well as full-sentence definitions for key terms; finally, it is small-sized with approximately 1900 entries, and both digital and printed according to its medium. Referencing the Introductory section, it is compiled from the corpus of current EU legal documents in the field of waste management (Basel conventions, EC, and EEC directives and decisions). It also says that the dictionary aims to fulfill receptive and productive functions of users (even though a dictionary is just an auxiliary means to this end) getting in direct contact with this specialized register, such as field experts, companies, public enterprises, and administration). Besides, it is also aimed at being used as a supplementary teaching resource for university students of environmental protection. Complying with this statement, the ESDWM is expected to be profiled for productive functions which imply the inclusion of lexical entries that enhance achieving good command of ESP.

In order to support the hypothesis that verbs are not duly represented in English-Serbian dictionaries, the following Table 1 will focus on the quantitative distribution of included parts of speech of ESDWM entries. The ESDWM marks five parts of speech – nouns (n), verbs (v), adjectives (adj), adverbs, (adv) and conjunctions (conj). As expected, nouns dominate; numbers are presented in Table 1¹.

Table 1: Parts of speech in the ESDWM

No	Part of speech	Number	Percent
1	Nouns	1614	86%
2	Adjectives	162	8.6%
3	Verbs	85	4.5%
4	Adverbs	16	0.9%
	TOTAL	1877	100%

The distribution of grammatical classes is in accordance with the previous findings in other registers which give preference to nouns in the number of two-

¹ Numbers for conjunctions are not included in the Table 1 because they are not relevant for this research.

thirds of all terms (Cabr , 1999, 112) or even over 90 % (Mili , 2015: 4). In percentage terms, nouns of the ESDWM account for about 86 %, adjectives 8.6%, verbs 4.5 %, and adverbs 0.9 %. The following section sheds light on the morpho-syntactic characteristics of verbs, which is followed by a critical review of the description thoroughness of this category in the ESDWM. Given that the percentage of verbs is even lower than that of adjectives, what follows is how a more appropriate balance could be reached by including base forms of nominal and adjectival derivatives and particle verbs. Accordingly, the ESDWM lexical inventory will be analyzed in terms of the following parameters: a) verb-related grammatical information, b) nominalized verbs focusing on *-ing*, c) adjectives focusing on *-ed* and *-ing* forms, and d) nominal and adjectival derivatives of particle verbs.

This research has certain limitations, first of all, the size of the corpus. Consequently, assumptions presented in this paper should be further investigated with a larger of number terminological and general dictionaries included.

3.1. Verbs in the ESDWM

Table 1 clearly asserts the prevalence of nouns (over 86%), while verbs make up only 4.5% of the entries in the ESDWM. Even though entries for nouns typically dominate in terminological dictionaries, these numbers allow us to pose the question of whether more verb entries should be introduced. One of the reasons for posing such a question is the fact that the entries for some nouns and adjectives in the ESDWM represent lexemes derived from verbs, but the verbs from which they were derived are not included in the same or separate entry. Entries for such nouns and adjectives will be discussed in the following sections.

As for the entries for verbs, verbs in the ESDWM are simply marked as *v*, without any information about their transitivity, irregular forms, or contextual use and examples. Serbian translation equivalents include either a single equivalent or several verbs listed without the context in which they are used, even when the meanings are quite different, which may cause misunderstanding in the comprehension of professional texts. Moreover, the ESDWM includes the entries belonging to the general register, as well as those belonging to the given ESP. For example, the entry *accomplish*, which also belongs to the general register, is paired with the single Serbian equivalent - *postići*, again the verb not typical for ESP alone. The Serbian equivalents for the entry *acquire* include four lexemes: *dostignuti*, *pribaviti*, *kupiti*, *preuzeti*, without any additional information about the context where these equivalents occur. In the analyzed dictionary, ESDWM collocations were not listed but could be added as separate entries, based on the corpus research.

Finally, as has already been mentioned, verbs are significant because they play a central role when it comes to forming clausal syntactic structures and may

require specific types of nouns as arguments. Thus, entries for verbs in terminological (and other) dictionaries may provide the Serbian user with the information about the accompanying nouns, their animacy, and theta-roles. For instance, the verb *ban* (missing in the ESDWM, there is only a noun *ban* with the Serbian equivalent *službena zabrana*) in the active sentence in the subject position requires the animate human agent (a specific person or authorities) or an inanimate entity (e. g. a regulation which bans certain behavior); in the position of the direct object, it requires a theme (affected entity) inanimate or animate.

So, the ESDWM focuses on nouns as major terminological entries with a small number of entries for verbs. Besides, some entries for the included verbs lack clearly defined semantic and grammatical features for both the English and Serbian sides of the lexical entry. Overall, this is an argument for the conclusion that the Dictionary is essentially aimed for translators and not for academic users.

3.2. Nouns in the ESDWM

Nouns make up the most numerous part of speech in the ESDWM. However, the entries labelled *n* also include some forms in *-ing*, which could be treated as gerunds but are obviously derived from verbs. Entries for nouns are shown in Table 2.

Table 2: Nouns in the ESDWM

No	Type of nouns	Number	Percent
1	Ending in <i>-ing</i>	74	4.6%
2	Other	1540	95.4%
	TOTAL	1614	100%

This research would focus on the nouns ending in *-ing* because they are morphologically related to verbs. It can be argued that the nouns in *-ing* implicitly point to verbs from which they were formed and that the entries for these verbs should be added to provide a basis for the more comprehensive use of professional terminology, that is to structure the predication and an entire clause around the relevant professional term, not just to name a certain concept. The next passages analyze the entries in *-ing* and relate them to verbs from which they originate.

Generally speaking, the ESDWM does not list the verbs from which the nouns in *-ing* are derived: it does not add them along with these nouns in the same entry nor open a separate entry for them. For instance, the ESDWM specifies the noun entry *autoclave* (n) and another noun entry *autoclaving* (n), defining the latter as *processing in an autoclave*²; the entry for verb *autoclave* (v) is not included even though the definition for the listed *-ing* implies a process. There

² In Serbian “obrađivanje u autoklavu” (Mihajlov et al., 2004:14).

is a communicational need for the entry denoting a process, which is the primary domain of verbs, and the gerund could be specified as derived from the verb. Next, the entry *bale* (n) is followed by *baler* (n) and *baling* (n), but the verb is again missing; *blinding* is classified as a noun, and though it may also be an adjectival or modifier, the verb is missing again. Similarly, *burning* (n) is listed along with *burner* (n), but not the verb; *cleaning* (n) and *clean* (adj) without the verb, *coating* (n) but not *coat* (v). In the case of *compost* (n), the ESDWM lists *composter* (n) and *composting* (n) but not the verb from which the noun *composter* is derived. The electronic search of the documents consulted to compile ESDWM points to the quite frequent use of gerunds in this field, which may explain the numerous nominal entries in *-ing* in ESDWM. However, this relevant issue needs to be investigated further with a larger corpus.

Almost all of these deverbal nouns in *-ing* are closely (morphologically and semantically) related to the verbs from which they are derived; they primarily denote a process (which is the domain of verbs) and not the basic nominal concept itself - for instance, *verification*, along with *verifying*, *minimization* with *minimizing* etc. Consequently, it seems that the entries for verbs should be indicated to enable a more productive use of professional registers in a given field.

Finally, only a few of these nouns in *-ing* (about 5% of the nouns in *-ing* in the corpus) may also denote specific concepts, not processes related to verbs. Thus, for example, *coating* (n) does not imply just the process of adding a new layer, but the new layer itself; similarly denotes a nominal concept, a resulting product (residue), and *warning* an act of caution.

As for the Serbian translations of these nouns in *-ing* in the ESDWM, they are frequently Serbian deverbal nouns in *-nje* (*gorenje*, *čišćenje*, *kompostiranje*, *kondicioniranje*, *otprašivanje*, *predviđanje*, *odobranje*, *rukovanje*, *unajmljivanje*, *označavanje* etc.) or nouns denoting specific concepts (*coating* – *premaz*, *packaging* – *ambalaža/pakovanje*, *tailing* – *jalovina*). In some cases anglicisms were used (*leasing* – *lizing*, *monitoring* – *monitoring/praćenje efekata*, *oxidizing* – *oksidacija*, *sintering* – *sinterovanje*). Therefore, the nouns in *-ing* in the ESDWM overwhelmingly point to the conclusion that the missing verb related to these nouns should be explicitly listed among the entries.

3.3. Adjectives in the ESDWM

The next segment of the ESDWM relevant to this research relates to the entries of adjectives. Namely, the entries in the ESDWM labelled *adj* also include some forms in *-ed/en* and *-ing*, that is participial adjectives derived from verbs. Table 3 contains the numbers.

Table 3: Adjectives in the ESDWM

No	Type of adjectives	Number	Percent
1	Ending in <i>ed</i>	38	23.5%
2	Ending in <i>ing</i>	4	2.5%

3	Other	120	74%
	TOTAL	162	100%

First, it should be noted that the entries labelled as adjectives and ending in *-ed/-ing* mostly belong to the functional class of modifiers (or adjectivals) not to the adjectives as a part of speech. Namely, these entries occurred in the adjectival positions in the ESP texts which the authors of the ESDWM analyzed and marked *adj* accordingly. However, most of these entries are not established adjectives and their status will be discussed in the following passages.

The first, smaller group labelled as adjectives relates to those ending in *-ing*; this group includes the following entry with its offered translations: *containing* (adj) - *koji sadrži*; in addition, the entries in *-ing corresponding adj* – *odgovarajući, prikladan*; *existing* (adj) – *postojeći* and *pending* (adj) – *u očekivanju, tekući (spor)* are labelled as adjectives in some dictionaries (for instance, Hornby 2013). The first English entry (*containing*) is not a petrified/established adjective, but a present participle used in the attributive position, that is it functions as a premodifier. That this and similar entries do not belong to the part of speech as typical adjectives (and consequently do not have typical adjectival properties) can be proved by a series of morpho-syntactic tests applied in relevant studies (Palmer, 1989, McIntyre 2013). Discussing the features of adjectival participles, McIntyre (2013: 21) lists “the standard tests for the adjectival status of participles”: a) degree modifiers (like *very*), b) adjectival *un-* prefixation, c) selection by AP-selecting verbs (like *seem, become*), d) coordination with other adjectives, e) incompatibility with double objects. Thus, the above-mentioned premodifier *contain* is not premodified with intensifiers like typical adjectives (and adverbs), e.g. **very corresponding/rather pending*). Moreover, this entry labelled as an adjective does not pass other tests like filling the position of the subject complement after the copulative verbs like *seem/become* (**It seems existing*) or coordination with an adjective (**containing and comprehensive*).

The adjectives in *-ed* make the second, larger group with 38 entries; for example, these entries include *co-disposed, adj – zajedno odlagani (odloženi), combined, (adj) – kombinovani, comingled, (adj) – kombinovan, mešan, mešovit, dedicated (adj) – namenski, deferred, (adj) – odložen, designed, (adj) – projektovan, dizajniran, destined, (adj) – upućen negde, namenjen nekom mestu, developed, (adj) - razvijen* etc. It should be underlined that such entries are usually not accompanied by separate entries for corresponding verbs (like *exclude, v* and *excluded, adj*), even though they are sometimes accompanied by the corresponding noun, like in *design, (n)*, and *designed (adj)*. Therefore, most of these adjectival entries stand alone, without the corresponding verb or a noun. In addition, in some cases, the verb and an adjective derived from this verb (by the addition of typical adjectival suffixes) are listed (e.g. *foresee, v* and

foreseeable, adj).³ The above findings indicate that Dictionary is not only based on a poor corpus but is also lacking in up-to-date lexicographic description.

Like the entries labelled *adj* from the first group (those ending in *-ing*), the entries from the second group also do not pass the tests which distinguish true adjectives from past participles. Namely, they cannot be premodified (**very packaged*), cannot be coordinated with typical adjectives (**managed and tidy*, **repealed and difficult*), do not occur in the complement position, e. g. **It seems returned*, **It became undertaken*.

As for the Serbian translations, the ESDWM lists Serbian participles which are used to form passive voice or relative clauses. These translational equivalents additionally point to the verbal nature of these entries implying a dynamic process. For instance, the following equivalents include the Serbian passive participle, which distinguishes gender and number (cf. Piper et al. 2005): the equivalent of *combined* (adj) is *kombinovani*, of *comingled* (adj) it is *kombinovan*, *mešan*, of *deferred* (adj) *odložen*, of *equipped* (adj) *opremljen*. The equivalent is developed into a relative clause in *refunded* (adj) - *za koji je izvršena nadoknada troškova* (*for which a refund was paid back*). The last example (*refunded*) indicates that the lexicographic competence of the editors of specialized dictionaries should be paid particular attention to.

Taking into account the abovementioned features of the adjectival entries, it could be concluded that the entries labelled as adjectives in the ESDWM belong to the functional class of adjectivals or premodifiers in a noun phrase, but not to adjectives as a traditional part of speech.⁴ Moreover, these entries are actually participial premodifiers derived from verbs and thus imply qualities or states resulting from processes denoted by these verbs; therefore, they should be added either as separate entries and cross-referenced to the alphabetically listed derivational form or using another method by the selected lexicographic model.

3.4. Particle verbs and their entries in the ESDWM

The last small group of entries (only ten of them in the ESDWM) relevant to this research includes those related to English multi-word verbs or particle verbs (traditionally phrasal and prepositional verbs). The ESDWM introduces them as entries for verbs, but also as entries for adjectives and nouns.

Multi-word verbs in English represent phrasal lexemes consisting of a lexical verb and one or two particles which function as the modifier(s) of that verb (Prčić, 2008, 162, 164); traditionally (for instance, Palmer, 1989) three possible

³ The above findings indicate that Dictionary is not based on a poor corpus and is lacking in up-to-date lexicographic description.

⁴ As one of the reviewers indicated, in this case traditional dictionaries do not always provide an adequate grammatical framework because non-adjectival parts of speech through time may develop adjectival properties and function as adjectives.

combinations are distinguished: phrasal verbs (lexical verb followed by an adverbial particle), prepositional verbs (lexical verb followed by a prepositional particle) and phrasal-prepositional verbs (lexical verb followed by an adverbial and a prepositional particle). Being frequent in contemporary English (particularly in less formal register), these verbs represent a significant component of a bilingual dictionary and their appropriate use is a part of successful communicative skills (including ESP). For instance, the position of the particle is one of the syntactic features of these verbs which might be of interest to L2 dictionary-user: in transitive phrasal lexemes, the adverbial particles can precede or follow the direct object (with some exceptions). This feature is relevant for language use, and dictionaries may provide the entries for phrasal verbs with the labels *separable* or *inseparable*: separable for the phrasal verbs which allow different positions of the particle on the one hand and prepositional verbs which do not on the other. Some dictionaries of phrasal verbs (for example *Collins COBUILD Dictionary of Phrasal Verbs*, abbreviated as *CCDPV*) add a column with grammatical information for the possible position of the adverbial particle: if the particle can be placed immediately after the verb, the structure is V+ADV+N, if it can be placed after the direct object the structure is V+N+ADV.

In addition to discussing the entries for multi-word verbs themselves, it is also relevant to this research to discuss the nouns and adjectives derived from multi-word verbs. Namely, multi-word verbs, like one-word verbs, serve as the base for the derivation of nouns and adjectives. Thus, in the typical process of affixation, deverbal nouns are created by the addition of the suffix *-ing* (for example, *grow up*, v – *growing up*, n). The ESDWM lists only three entries for multi-word verbs and they are the following two-word combinations consisting of a verb and an adverbial particle: *carry out*, (v) (and this is the only instance where the ESDWM also lists the original one-word verb – *carry*, (v), along with the adjective *carried out*), *switch off* (v) and *switch on* (v).

Like in the above-mentioned instances of nouns and adjectives ending in *-ing* /*-ed* (sections 3.2. and 3.3.), the ESDWM uses the labels *adj* and *n* for adjectives and nouns derived from phrasal verbs. In addition to the abovementioned *carried out*, there are two more entries labelled as adjectives - *disposed of*, (adj) (along with *disposed*, *adj*) and *crossed-out* (adj). The entries labelled as nouns are the following: *drop-off* (n); *fallout* (n); *runoff* (n); *shut-down*, (n) and *start-up* (n). The entries labelled as nouns and adjectives are the results of the typical process of derivation of nouns from particle verbs; these nouns and adjectives are written as one word or with a hyphen, with the stress shifted to the initial syllable. However, a terminological dictionary would enable achieving a more productive competence in the teaching process if such nouns and adjectives are given the status of separate entries cross-referenced to the entry of a particle verb from which they were formed.

As for the entries labelled as adjectives with the verb *carry* (*carried out*, *crossed-out*), they are participles formed from the corresponding phrasal verbs without the proper adjective features and serve as premodifiers to condense the expressions used in professional ESP terminology. The entry with the verb *dispose* - *disposed of* (adj) is derived from a prepositional verb or a verb with the specified preposition (Huddleston & Pullum, 2002, 273) because the verb requires a specific preposition to introduce its prepositional complement. Therefore, *disposed of* does not make a proper lexical unit as an adjective and it should be listed as a verb entry with a note about the selected preposition.

The Serbian equivalents offered in the ESDWM in these adjectivals also include passive participle: *carried out* (adj) – *izvršen, obavljen, sproveden*; *crossed-out* (adj) – *precrtan*; *disposed of* (adj) – *odbačen, rešen*. The nouns are paired with the following equivalents: *drop-off* (n) – *dostava, a method of collecting recyclable materials so that individuals bring them to a specific collection point*⁵; *fallout* (n) – *atmosferski talog*; *runoff* (n) – *ocedne vode*; *shutdown* (n) - *zatvaranje*; and *start-up* (n) *započinjanje i puštanje u pogon*. Serbian equivalents of these nouns consist of nouns, phrases, or rather long descriptions which clarify the specific terminological meaning of the English noun; still, the inclusion of the phrasal verbs underlying English-derived nouns would contribute to a more successful communication in the given professional register.

The fact that the ESDWM typically lacks entries for those particle verbs from which nouns and adjectives are derived opens the question about the place of the entries for these verbs. Having in mind the significance of particle verbs in the teaching process during which the students should acquire communicative competence within the field of waste management and ESP in general, it seems that the user-oriented terminological dictionaries with entries for these verbs would enhance the productive knowledge of students.

4. CONCLUSION

This paper was an attempt to shed some light on the quantitative share of verbs in English-Serbian terminological dictionaries compiled by field specialists from the communicative perspective in today's angloglobalized world. Research builds on the quantitative verb-focused analysis of three English-Serbian dictionaries, all authored by field specialists, which is followed by a corpus-based analysis performed on about 1900 lexical entries included in a bilingual English-Serbian dictionary of waste management terms. The findings can be summarized in three major issues. Firstly, verbs represent the third-largest class of terms falling significantly below the second-placed adjectives, which is not by previous

⁵ In Serbian "metod sakupljanja reciklabilnih materijala tako što ih pojedinci donose na određeno zbirno mesto" (Mihajlov et al., 2004, 33).

research results according to which verbs are the second-largest class of terms. However, a deeper insight into the morphosyntactic characteristics of included entries reveals that a great number of nominal and adjectival entries are derivatives of non-included infinitive verb bases, most of which are not true adjectives since they cannot be premodified. This provides arguments for a suggestion that a terminological dictionary should include infinitive verb bases whenever there is a gerund and past/present participle term, which could be given the status of extra entries that could be cross-referenced to its derivatives. Secondly, such a proposal is justified on the ground of a functionally-profiled terminological dictionary, since it is increasingly aimed for enhanced communicative skills in professional circles. Namely, terminological dictionaries make significant additional teaching tools and, if properly designed, may help to achieve productive language knowledge in ESP; as already mentioned, the entries for verbs are significant in that respect because verbs make the predicate and build specific argument structures. Therefore, wherever possible, entries for verbs should make a larger percentage in the total number of entries than in the dictionaries discussed in this paper. Lastly and even most importantly, specialized terminological lexicography must rely on the mutual work of field specialists, linguists, and IT experts.

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O LEKSIKOGRAFSKOM TRETMANU GLAGOLA U ENGLESKO-SRPSKIM TERMINOLOŠKIM RJEČNICIMA

Rad istražuje mjesto glagola unutar terminološkog sistema dvojezičnih englesko-srpskih rječnika, usredsređujući se na one rječnike koje su napisali stručnjaci iz određenih oblasti. Metoda je korpusno zasnovana kontrastna analiza englesko-srpskog rječnika za upravljanje otpadom koji sadrži otprilike 1900 termina. Analiza se oslanja na dosadašnje istraživačke rezultate, kao i na preliminarnu kvantitativnu analizu tri englesko-srpska rječnika, koje su napisali stručnjaci iz određenih oblasti, a prema kojima prevladavaju imenice, dok je glagola znatno manji broj. Budući da i nalazi unutar korpusa u ovom istraživanju ukazuju na neujednačenu pokrivenost vrsta riječi u korist imenica, rad raspravlja o potrebi davanja glagolima više prostora u dvojezičnim englesko-srpskim rječnicima. U tom smislu, rad raspravlja o unosima koji su označeni kao imenice i pridjevi u korpusu, ali koji su izvedeni od glagola, te tvrdi da bi specijalizovani rječnici trebalo da budu organizovani tako da uključuju unose za glagole iz kojih su ti imenice i pridjevi izvedeni.

Ključne riječi: erminologija, specijalizirana leksikografija, glagoli, engleski, srpski, upravljanje otpadom