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Reproducibility of figurative terms in musical discourse¹

Abstract. The paper analyses terminological potential of the Croatian figurative multiword units or collocations containing basic musical terms such as *melodija* 'melody', *akord* 'chord', *tempo* 'tempo' or *ritam* 'rhythm'. By querying the concordances containing those terms in Croatian general language corpora – Croatian National Corpus (HNK), Croatian Web Corpus (hrWaC) and Croatian Language Corpus (Riznica) – as well as analysing a specialized corpus compiled of papers from Croatian professional and scientific journals on music *Arti musices* and *Theoria*, figurative terms common for both scientific and popular text registers are determined. Taking into account the conceptual content of the extracted collocations, it is determined which collocations can be considered conceptually and linguistically reproducible so that they are not only viewed as figurative expressions in musical discourse, but can be labelled as proper musical terms.

Key words: *reproducibility, figurative terms, musical terminology, musical discourse*

1. Introduction

Texts on music, musical reviews in particular, abound in figurative expressions such as *heavenly chord*, *skipping melody* or *gentle sound*. Some of these collocations appear regularly enough in certain contexts in order to be considered fixed expressions both in general language discourse and in

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specialized discourse on music, i.e. to be defined as terms in musical terminology. To define a word or a multiword unit as a term denoting a unit of specialized knowledge, several criteria have to be met (Sager 1997), one of which is the fixedness or the reproducibility of the terminological unit in the same form in all specialized contexts. A lexical unit can be considered a term in a certain specialized domain when it results from a convention, i.e. when it is agreed upon or used often enough in a specialized community to be considered agreed upon; when its content or the concept it represents can be explicitly defined, and when the description of a concept leads to the understanding of the field of knowledge in which it occurs (Lérat 1989). Terms can have different and variable pragmatic status, depending on their acceptability and spread of use (Sager 1990: 59), but also on the existence of other related or potentially synonymous terms in the same context. Regardless of the motivation for the term formation process, there is always a clear link between a term and the concept of specialized knowledge it denotes, i.e. between a mental representation of an abstract or concrete object within a specialized context or field (ISO 704: 2).

This paper analyses terminological potential of figurative multiword units or collocations that contain basic musical terms such as *melody*, *chord*, *tempo* and *rhythm*. Figurative terms common for both scientific and popular text registers are determined on the basis of examples extracted out of Croatian general language corpora as well as having analysed the collocations extracted from a specialized corpus compiled of papers from Croatian professional and scientific journals on music *Arti musices* and *Theoria*. Considering the conceptual content of the extracted collocations, it is determined which collocations can be considered conceptually and linguistically reproducible so that they are not only viewed as figurative expressions in musical discourse, but can be labelled as proper musical terms. Since context is one of the determining factors in term formation (Cabré 2003), the fixedness and the level of modification of extracted collocations is analysed by taking into account the contextual variation conditioned by the type of text registers in which they appear.

1.1. Term formation and phrasal terms

Term formation or the process of naming concepts in a particular special language community is a conscious and deliberate human activity (although the “author” of a term is usually not known), and it relies on existing lexical elements (Sager 1997: 25). Depending on the lexical units available within a specialized community and the discourse it uses, there are

usually three major approaches available in the process of term formation (Sager 1990: 71–80):

- a) the use of existing lexical units, which is often based on the terminologisation of general language words through the cognitive mechanisms of metaphor and metonymy (e.g. *apron* in general language and in aviation or *bleeding* in engineering; by creating complex terms on the basis of similarities of form, function and position, e.g. *ribbed floor* and *mushroom ceiling*) or re-terminologisation when a term from one specialized domain is used to denote a different concept in another domain (e.g. *hardware*);
- b) the modification of existing resources by means of derivation, compounding, conversion or compression, resulting often in multiword terms as linguistically most typical type of terms (e.g. *weather-resisting feature*, *simply-supported beams*); and
- c) the creation of new lexical entities or neologisms, which is the least common type of term formation.

Since figurative terms are mostly the result of conceptual metaphor, metonymy or conceptual blending (Tercedor et al. 2012a, Tercedor Sánchez et al. 2012b) that transform lexical units from general language into terms in specialized communication, the first type of term formation according to Sager is the one referred to here as the dominant principle at work in the creation of figurative phrasal terms.

From the point of view of phrasal aspects of terms, Cabré (1999) distinguishes three major types of phraseological units in specialized discourse: phrasal terms that she considers to be “lexical structures with a terminological value”, free structures as “free syntactic formations” occurring in discourse, and combinations that “occur frequently in the discourse of a special subject field (which makes them similar to terminological phrases), but they do not correspond to established concepts” (1999: 91). She refers to them as collocations, phraseology or phrasal units: *reboot the computer*, *adjourn a session*, *insufficient memory*, *play a chord*. Formally, there is no difference between *phrasal terms* and *free phrases* because they are both complex linguistic units, in which it is sometimes difficult to pinpoint their exact terminological value. However, Cabré claims that they “do not behave in the same way in discourse” (Cabré 1999: 91).

1.2. Fixedness and variation

Regardless of different terms used in various linguistic disciplines to refer to fixed lexico-grammatical units frequently occurring in discourse, such as *idiom*, *phraseological unit*, *phraseme*, *phraseologism*, *collocation* or *multiword*

unit, relative fixedness of form and the stability of meaning seem to have been the underlying components in all theoretical approaches (Sinclair 1991, Cowie 1998, Moon 1998, Gries 2007).² Since a term needs to appear in the specialized community discourse in a fixed form and with a stable meaning in order to be recognized as a term, the notion of fixedness is one of the key characteristics of “termhood”, along with the ability of a term to be repeatedly used in specialized discourses of various level of expertise.

Frequent use of established phraseological units and lexical units in general, on the other hand, generates variation as a necessary means to achieve linguistic creativity and a successful transfer of experience and knowledge, even in the most specialised texts (Pecman 2014). In terminological research, term variation has been analysed both from the perspective of descriptive terminological approaches and for the purposes of terminology standardization, with corpus-based methodological approaches leading the way in using term variation to gain more insight into the functioning of specialized knowledge categories (Daille 2017, Drouin et al. 2017). A large number of term variants usually found within a corpus could be classified as figurative expressions or phraseological units in general because they are often used as synonyms for preferred and accepted terms in contexts when it is clear that they refer to the same concept. The aim of this paper is to analyse figurative collocations appearing in general language as well as in specialized musical discourse, and to determine which extracted collocations could be considered proper phrasal terms.

2. Methodology and materials

In order to determine the terminological potential of figurative collocations containing Croatian musical terms, we have queried three Croatian general language corpora – Croatian National Corpus (HNK), Croatian Web Corpus (hrWaC) and Croatian Language Corpus (Riznica) – as well as a specialized corpus of Croatian professional and scientific journals on music. The aim of the analysis was to determine figurative terms common for both scientific and popular text registers.

² Gries (2008) gives a good overview of different terms used to refer to *phraseologism* in different linguistic disciplines and theoretical approaches, namely in phraseology, generative linguistics, cognitive linguistics, construction grammar and corpus linguistics. For a recent study of phraseological terms used in the Croatian phraseological literature (which struggles between staying in line with the Russian tradition and following the terminology from the Anglo-American research in cognitive linguistics), see Parizoska and Stanojević (2018).

The corpus of academic texts and musical reviews written in Croatian was compiled using corpus compilation tools available in Sketch Engine (Kilgariff et al. 2014). The corpus consists of 139 documents from two freely available journals, *Arti musices* (vol. 38/1, 2007 to 49/1, 2018) and *Theoria* (vols. 1, 1999 – 19, 2017), that had been available in .pdf format, making for total of 1 258 800 words or 1 690 000 tokens. *Arti musices* is the only specialized scholarly journal in the field of musicology in Croatia, and it has been published continuously since 1969. Since it is a scientific journal with an international, double-blind peer review process, we considered the texts published in it to belong to scientific discourse. Only papers written in Croatian have been taken into account.

Theoria is the annual journal published by the Croatian Association of Music Theorists since 1999. It is intended for the members of the Association, all music schools and music academies in Croatia, as well as for all general education institutions where music is taught. Since it publishes articles about music theory intended for a wider audience, the texts published there can be considered to be part of a more popular specialized discourse. Nevertheless, no distinction was made in the examples extracted out of the specialized corpus based on the level of expertise of texts in the two subcorpora, but they have rather been compared to the ones extracted out of general language corpora.

Having compiled the specialized corpus, the word sketches of four basic musical terms (*melodija* 'melody', *akord* 'chord', *ritam* 'rhythm', and *tempo* 'tempo') have been extracted in order to gain an insight into the types of collocations in which they appear in the corpus. Regardless of the thorough morphosyntactic information represented in word sketches, some multiword units listed as collocations could be misleading, particularly in small specialized corpora in which statistical analysis cannot be as precise as in large corpora. Therefore, it was necessary to analyse the concordances of those four terms, too.

The same four terms were used as target words to query the concordances in general language corpora, in which a random concordance sample has been analysed. Figurative collocations common for both scientific and general language discourse were determined, after which phrasal terms have been established. Collocations were labelled as figurative if the meaning of the head was not the same as the first sense of that word in a dictionary, or if the meaning of the collocation could be (by native speaker intuition) considered removed from the denotative meaning. In other words, any collocation that could not be understood in its literal sense was considered to have figurative or metaphorical meaning.³

Considering that the majority of terms are nouns, verbs or adjectives, collocations containing pronouns, proper nouns, auxiliary verbs, adverbs and prepositions have been excluded based on their low terminological potential. Although the term *figurative* is often used synonymously with the term *metaphorical*, we have decided to use the term *figurative expressions* to denote all linguistic expressions in which a shift from the literal meaning can be observed, regardless of the cognitive mechanism that lies at the basis of such a change (e.g. conceptual metaphor, metonymy or blending). Following Cabré (1999), we use the term *phrasal term* in the meaning of ‘phraseological structure with a terminological value’, while the term *collocation* is used here for all multiword units automatically generated in word sketches or manually extracted from corpus concordances, i.e. for multiword units frequently occurring in the same form and with the same meaning.

3. Results and discussion

Having queried the general language corpora with four target words (*melodija* ‘melody’, *akord* ‘chord’, *ritam* ‘rhythm’, and *tempo* ‘tempo’), the following syntactic patterns were extracted from the most frequent concordances: modifier (noun/adjective) + target word, target word as a modifier + noun, target noun as a subject + verb and verb + target noun as an object. All concordances potentially terminologically relevant were analysed, excluding concordances in which terms were preceded or followed by pronouns, adverbs, prepositions, proper nouns, etc. Extracted collocations are listed in the tables by frequency, i.e. according to the number of appearances in the corpora.

The first step in extracting relevant figurative collocations from the specialized corpus was to extract word sketches for the four terms. Each word sketch consists of a number of syntactic relations that depend on the language of the corpus, i.e. on the sketch grammar used in its compilation.⁴ Considering the limitations of the paper, not all extracted collocations could have been listed here, therefore only those with terminological potential are analysed, both in terms of their figurative nature and in their potential to denote a concept of specialized knowledge.

³ See Steen et al. (2010) for a description of the MIPVU method that is often used for annotating metaphorical use.

⁴ These relations are differently called in English and Croatian corpora, which has also been the subject of change in different versions of sketch grammars.

3.1. Collocations with the target word *melodija* 'melody'

As expected, general language corpora exhibited a large number of descriptive collocations containing the word *melodija* 'melody' in the pattern **adjective + noun** (Table 1). Only a small number of those collocations can be classified as musical terms proper; such as *klasična melodija* 'classic melody' or *tradicionalna melodija* 'traditional melody', in which adjectives point to the origins of a melody, rather than to its descriptive features. In the examined specialized corpus, only one case occurred frequently, *augmentirana melodija* 'augmented melody'. This collocation can be considered a phrasal term, and

Table 1. Collocations with the term *melodija* 'melody'

General language corpora	General and specialized corpora	Specialized corpus only
adjective + <i>melodija</i> 'melody' <i>bogata</i> 'rich', <i>jednostavna</i> 'simple' <i>klasična</i> 'classic', <i>tradicionalna</i> 'traditional' <i>lagana</i> 'light', <i>ljepljiva</i> 'sticky' <i>nježna</i> 'gentle', <i>popularna</i> 'popular' <i>tečna</i> 'fluent', <i>vječna</i> 'eternal' <i>zabavna</i> 'entertaining', <i>puna</i> 'full' <i>raskošna</i> 'luxurious', <i>pamtljiva</i> 'catchy'	<i>jednostavna</i> 'simple'	<i>augmentirana</i> 'augmented'
noun + <i>melodija</i> 'melody' <i>zvuk melodije</i> 'the sound of a melody' <i>ritam melodije</i> 'the rhythm of a melody' <i>oblik melodije</i> 'the shape of a melody'		<i>kretanje melodije</i> 'the movement of a melody'
<i>melodija</i> 'melody' + noun <i>melodija festivala</i> 'the melody of a festival' <i>melodija pjesme</i> 'the melody of a song'		
verb + <i>melodija</i> 'melody' <i>nositi / prenositi / donositi melodiju</i> 'to carry / carry over / bring over' <i>pratiti</i> 'to accompany' (<i>prateća melodija</i> 'accompanying melody') <i>voditi</i> 'to lead' (<i>vodeća melodija</i> 'leading melody') <i>skidati / skinuti melodiju</i> 'to take down' <i>imati melodiju</i> 'to have a melody'	<i>iznositi melodiju</i> 'to take out a melody' <i>voditi melodiju</i> 'to lead a melody'	<i>stvarati melodiju</i> 'to create a melody'
<i>melodija</i> 'melody' + verb <i>melodija prati</i> 'a melody accompanies sth' <i>melodija se kreće</i> 'a melody moves'	<i>melodija se kreće</i> 'a melody moves'	

its semantic content indicates a certain degree of figurativity, namely a type of synecdoche where the whole (*melody*) stands for its constituent parts (*note values*), which are augmented. Although some other examples also bear figurative meanings (e.g. *zarazna* 'contagious', *bogata* 'rich', *ljepljiva* 'sticky' etc.), none of them is likely to appear in a specialized discourse on music: the phrasal terms containing the adjectival modifier and the noun *melody* seem to have terminological value only in cases where the adjective is a musical term itself (e.g. *augmented*).

In the pattern **noun + melody**, terminologically relevant collocations appear to be those in which melody was modified by the nouns *zvuk* 'sound', *ritam* 'rhythm' and *oblik* 'shape'. In all three cases the modifying nouns are technical terms themselves, and their collocations can be considered to be phrasal terms.

The noun *melodija* 'melody' was in the position of a **modifier** in the collocations such as *melodija festivala* 'the melody of a festival' and *melodija pjesme* 'the melody of a song'. Both examples express a possessive/objective relation only, without any terminological potential. Such collocations rarely appear as fixed in a specialized discourse on music.

Taking into consideration their semantic content, the collocations with terminological potential are exactly the ones with implied figurative meanings. All **verbal** collocations with the target word *melodija* extracted from the corpora, with the exception of *stvarati melodiju* 'to create a melody', can be considered proper phrasal terms created by the terminologisation of general language words through conceptual metaphor. In the expression *skidati melodiju* 'to take down a melody', where the word *melody* serves as an object, the metaphor resides in the predicate (*skidati* 'to take down', meaning 'to write down a melody' or 'to reproduce a melody in singing/playing'). In the case of expressions such as *melodija se kreće* 'a melody moves' and *melodija prati* 'the melody is accompanying sth', the personified subject carries the metaphorical meaning of the predicate. Similar expressions often occurred in both the general and specialized corpora respectively (*iznositi melodiju* 'to take out a melody', *voditi melodiju* 'to lead a melody', *melodija se kreće*, *kretanje melodije* 'the movement of a melody' etc.). Such personification of the subject, *melody*, which comes into being in (musical) time, involves a spatial schema of musical temporality, the MUSICAL LANDSCAPE "in which the observer moves across a landscape and times are points or regions on that landscape" (Johnson and Larson 2003: 67).

Personification can also be identified in certain cases of collocations following the adjective + noun pattern (*zarazna* 'contagious', *bogata* 'rich', *zabavna* 'entertaining', *nježna* 'gentle', *vesela* 'merry'). However, those expressions have

shown no significant terminological value, as they are more likely to appear as stylistic devices than to denote concepts in a specialized discourse on music.

3.2. Collocations with the target word *akord* 'chord'

In the case of the target word *akord* 'chord' (Table 2), the analysis of general corpora again resulted in a number of frequent collocations composed of an **adjective** and a **noun**. As in the examples with the target word *melodija*, only a few of the listed collocations display terminological potential, which is also due to the figurative meaning of the adjective that is itself a musical term, e.g. *dominantan* 'dominant'; a *dominant chord* is the one that carries the dominant harmonic function, rather than the one that dominates in music. In the examined special corpora, an analogous expression occurred, *subdominantni akord* 'subdominant chord', which indicates its harmonic function and can thus be considered a phrasal term in the proper sense.

Both the general and specialized corpora exhibit an array of figurative collocations following the **noun + akord** and **verb + akord** schemas. These collocations generally correspond with three basic conceptual contexts.

The prevailing number of collocations follow the conceptual metaphor A CHORD IS A BUILDING. Examples such as *graditi/izgraditi akord* 'to build a chord' (meaning 'to make a chord by superposition of certain intervals above its lowest tone') or *građa akorda* 'the chord structure' (indicating the intervallic content of a chord) appear both in general and specialized discourse on music respectively, and can be considered proper phrasal terms. Corresponding examples of collocations denote the reverse, deconstructive processes: once built, a chord can be *rastavljen* 'disassembled' or *razlomljen* 'broken apart',⁵ as a result of actions denoted by the **verb + noun akord** figurative expressions such as *rastaviti akord* 'to disassemble a chord' (which appears frequently in all examined corpora and is a proper phrasal term in Croatian) or *razložiti akord* 'to split a chord into layers' (which is a descriptive phraseme that does not occur in specialized discourse on music).

The second group of collocations points to the above-mentioned spatial schema of musical temporality, the MUSICAL LANDSCAPE. The landscape in question is built of complex structures that proceed in time: *slijed akorda* 'sequence of chords' (a phraseme that appears in all examined corpora, but has no figurative meaning), which follows a certain organized path called *progre-*

⁵ The equivalent English term is *broken* or *arpeggiated chord*.

Table 2. Collocations with the term *akord* 'chord'

General language corpora	General and specialized corpora	Specialized corpus only
adjective + <i>akord</i> 'chord' <i>dalek</i> 'distant', <i>zlatan</i> 'gold' <i>završni</i> 'final', <i>zadnji</i> 'last' <i>osnovni</i> 'basic', <i>masivan</i> 'massive' <i>razlomljen</i> 'broken apart' <i>jednostavan</i> 'simple', <i>složen</i> 'complex' <i>snažan</i> 'strong', <i>težak</i> 'heavy' <i>otvoren</i> 'open', <i>zatvoren</i> 'closed' <i>nježan</i> 'gentle', <i>božanski</i> 'divine' <i>dominantan</i> 'dominant', <i>čist</i> 'clean' <i>sumoran</i> 'dreary', <i>sjajan</i> 'shiny' <i>klasičan</i> 'classic', <i>svečan</i> 'solemn'	<i>subdominantan</i> 'subdominant'	
noun + <i>akord</i> 'chord' <i>progresija akorda</i> 'chord progression' <i>slijed akorda</i> 'sequence of chords' <i>miris akorda</i> 'scent of a chord' <i>spajanje akorda</i> 'connecting chords' <i>oblik akorda</i> 'the shape of a chord'	<i>slijed akorda</i> 'sequence of chords' <i>spajanje akorda</i> 'connecting chords'	<i>paleta akorda</i> 'the palette of chords' <i>nizanje/niz akorda</i> 'sequence of chords' <i>gradnja akorda</i> 'building a chord' <i>povezivanje akorda</i> 'connecting chords' <i>povezanost akorda</i> 'relatedness of chords'
verb + <i>akord</i> 'chord' <i>rastaviti</i> 'disassemble', <i>razložiti</i> 'split into layers' <i>graditi</i> 'build', <i>spojiti</i> 'connect' <i>lupati</i> 'bang'	<i>rastaviti akorde</i> 'to disassemble chords' (<i>rastavljeni akordi</i> 'disassembled chords') <i>izgraditi akord</i> 'to build a chord'	
<i>akord</i> 'chord' + verb		<i>akordi izražavaju</i> 'chords express sth' <i>akord nastupa</i> 'a chord appears' (as in a performance)

sija akorda 'chord progression' (a proper phrasal term indicating the notion of an observer moving/progressing through the temporal space of music).⁶

⁶ Although it appeared only in general corpora examined here, the phraseological unit *progresija akorda* 'chord progression' (together with its abbreviated form, *progresija* 'progression') is a proper phrasal musical term that belongs to the field of the theory of harmony; as such, it appears in most European languages).

Such *sequences of chords* are made by *connecting* them (*spajanje akorda*) in an action called *vođenje glasova* ‘voice leading’ (i.e. connecting successive tones of separate voices – melodies – in order to form a sequence of chords), a figurative expression similar to the one mentioned in the previous section (3.1), *voditi melodiju* ‘to lead a melody’. The last three collocations contain figurative meanings which semantically differ from the sum of their constituent parts.

The last significant category of figurative collocations with the target word *akord* display personification, which was also detected in the case of *melody*. Such collocations appeared in the specialized corpus exclusively, where the chord behaves like an actor, emphasizing the expressive content of a musical element: *akordi izražavaju* ‘chords express sth’ or *akord nastupa* ‘a chord appears’ (as in a performance). Such constructions can be composed of other terms denoting elements of a musical structure (e.g. *motiv/tema/glas/dionica nastupa/izražava* ‘a motive/theme/voice/part appears/expresses sth’), revealing the underlying conceptual metaphor, A MUSICAL ELEMENT IS AN ACTOR.

3.3. Collocations with the target word *ritam* ‘rhythm’

The general corpus query with the target word *ritam* ‘rhythm’ displayed similar types of collocations as the ones discussed in the previous two subsections. Constructions following the **adverb + noun** scheme do not abound in terminological potential, and can be roughly divided into two types of expressions: the ones denoting general quality in a more literal sense (e.g. *dobar* ‘good’, *loš* ‘bad’ etc.), and others that could be interpreted as a manifestation of the personification of rhythm (e.g. *žestok* ‘fierce’, *vatren* ‘fiery’, *veseo* ‘merry’, *razigran* ‘playful’ etc.). Only one adverbial collocation has proper terminological value: *punktirani ritam* ‘punctuated (dotted) rhythm’ (a swinging type of rhythm composed of a longer note, notated with a dot – *punctum* – followed by a shorter one). The specialized meaning points to a particular sort of semiographic metonymy, where the notational feature is being projected onto the notated aspect of music, namely the *rhythm*. Corresponding verbal collocations occurred in the specialized corpus: *punktirati ritam* ‘to punctuate the rhythm’ and *oštro punktirani ritmovi* ‘sharply punctuated rhythms’.

Further examples of adjectival collocations with the target word *ritam* ‘rhythm’ that occur in the specialized corpus only are derived by the terminologisation of adjectives, whose specialized meanings indicate their technical treatment (*slobodan* ‘free’ or *strog* ‘strict’, also used in collocation with the terms such as *composition*, *counterpoint* etc.) or psychological value (*unutarnji* ‘inner’, dependant on the inner representation of a subject).

Table 3. Collocations with the term *ritam* 'rhythm'

General language corpora	General and specialized corpora	Specialized corpus only
adjective + <i>ritam</i> 'rhythm' <i>dobar</i> 'good', <i>loš</i> 'bad' <i>žestok</i> 'fierce', <i>vatren</i> 'fiery' <i>lagan</i> 'light', <i>težak</i> 'heavy' <i>prirodan</i> 'natural', <i>razigran</i> 'playful' <i>zarazan</i> 'contagious' <i>veseo</i> 'merry', <i>čvrst</i> 'firm' <i>blag</i> 'mild', <i>oštar</i> 'sharp' <i>tečan</i> 'fluent', <i>tvrđ</i> 'hard' <i>punktiran</i> 'punctuated' <i>nježan</i> 'gentle', <i>izlomljen</i> 'broken in pieces'		<i>slobodan</i> 'free' <i>strog</i> 'strict' <i>unutarnji</i> 'inner'
noun + <i>ritam</i> 'rhythm' <i>podloga ritma</i> 'base of the rhythm' <i>uzimanje ritma</i> 'taking the rhythm'		
verb + <i>ritam</i> 'rhythm' <i>pratiti</i> 'to follow', <i>popratiti</i> 'to accompany' <i>držati</i> , <i>održati</i> 'to hold' <i>održavati</i> 'to hold on' <i>izgubiti</i> 'to lose', <i>pronaći</i> 'to find' <i>hvatati</i> 'to catch', <i>kontrolirati</i> 'to control' <i>donositi</i> 'to bring over' <i>ispuniti</i> 'to fulfil', <i>preuzeti</i> 'to take over'	<i>pratiti ritam</i> 'to follow the rhythm' (<i>pratiti tok ritma</i> 'to follow the flow of the rhythm') <i>uhvatiti ritam</i> 'to catch the rhythm'	<i>punktirati ritam</i> 'to punctuate the rhythm' <i>oštro punktirani ritmovi</i> 'sharply punctuated rhythms')

Significant figurative expressions following the **noun + *ritam*** schema were found in the general corpora only, and thus cannot be labelled as carrying terminological value. In the case of two nominals, *podloga ritma* 'the base of the rhythm', which point to the BUILDING metaphor, a component of music corresponds to an architectural element, which also underlies the above-mentioned conceptual metaphor A CHORD IS A BUILDING.

The extracted examples of the **verb + *ritam*** schema can be found in both general and specialized discourse. The mutual conceptual metaphor RHYTHM IS AN OBJECT underlies all collocations found in the observed corpora, represented by the figurative use of the verbs *pratiti* 'to follow', *popratiti* 'to accompany', *držati*, *održati* 'to hold', *održavati* 'to hold on', *izgubiti* 'to lose', *pronaći* 'to find', *hvatati* 'to catch', *kontrolirati* 'to control', *donositi* 'to bring over', *ispuniti* 'to fulfil' and *preuzeti* 'to take over'. However, there are only two cases shared by the general and specialized corpora, *pratiti ritam* 'to follow the

rhythm' and *uhvatiti ritam* 'to catch the rhythm', which can be considered proper phrasal terms.

3.4. Collocations with the target word *tempo* 'tempo'

Due to the fact that both words denote the proceeding of musical time, the collocations with the target word *tempo* 'tempo' reveal similar features as the ones containing the target word *ritam* 'rhythm'. Among them, the expressions following the **adjective + tempo** and **noun + tempo** patterns that occurred in general corpora only, often exhibit figurative content. The examples point to personification (*dobar* 'good', *furiozan* 'furious', *miran* 'peaceful' or *gibljihost tempa* 'the mobility of the tempo') or the VERTICALITY schema, where the speed of the proceeding of music is represented in spatial terms, such as *visok* 'high' for the quick tempo. Tempo changes are depicted as *rast* 'growth' (an increase in speed) or *pad* 'fall' (a decrease in speed). Collocations found in the specialized corpus are more literal and correspond to

Table 4. Collocations with the term *tempo* 'tempo'

General language corpora	General and specialized corpora	Specialized corpus only
adjective + tempo 'tempo' <i>lagan/lak</i> 'easy', <i>polagan</i> 'easy, slow' <i>visok</i> 'high', <i>dobar</i> 'good', <i>furiozan</i> 'furious' <i>miran</i> 'peaceful'	<i>polagan</i> 'easy, slow' <i>(u polaganom tempu</i> 'in a slow tempo', <i>u vrlo polaganom tempu</i> 'in a very slow tempo')	
noun + tempo 'tempo' <i>rast</i> 'growth', <i>pad</i> 'fall' <i>gibljihost tempa</i> 'mobility of the tempo'		
verb + tempo 'tempo' <i>pratiti</i> 'to follow', <i>držati</i> 'to hold' <i>uhvatiti</i> 'to catch', <i>pojačati</i> 'to strengthen' <i>smanjiti/smanjivati</i> 'to decrease' <i>podići, podizati</i> 'to lift up' <i>spustiti</i> 'to lower', <i>nastaviti</i> 'to continue' <i>izgubiti</i> 'to lose', <i>forsirati</i> 'to force' <i>izaći iz tempa</i> 'to exit tempo' <i>ući u tempo</i> 'to enter tempo' <i>prelaziti (iz jednog tempa u drugi)</i> 'to cross over (from one tempo to another)' <i>biti u tempu</i> 'to be in tempo' <i>ostati u tempu</i> 'to stay in tempo'	<i>prekoračiti tempo</i> 'to cross over the tempo'	<i>odstupiti od tempa</i> 'to step away from the tempo' <i>ubrzzati</i> 'to increase in speed' (<i>ulazi u ubrzan tempo</i> 'enters the accelerated tempo')

the expressions commonly used to depict speed in general language (e.g. *polagan* 'slow'). However, since their meanings do not change in collocations, they cannot be considered phrasal terms.

Among the collocations that follow the **verb + tempo** pattern, the examples of literal meaning remain rare (e.g. *ubrzati tempo* 'to accelerate the tempo'). Most listed terms exhibit figurative meanings based upon the already mentioned VERTICALITY schema (*smanjiti / smanjivati* 'decrease', *podići, podizati* 'to lift up', *spustiti* 'to lower') and the TEMPO IS AN OBJECT metaphor (*pratiti* 'to follow', *držati* 'to hold', *uhvatiti* 'to catch', *izgubiti* 'to lose'). However, a prevailing figurative concept among the verbal collocations with the target word *tempo* is certainly the conceptual metaphor TEMPO IS A CONTAINER, which is largely present in all examined corpora: thus, one can *izaći iz tempa* 'exit tempo', *ući u tempo* 'enter tempo', *prelaziti (iz jednog tempa u drugi)* 'cross over (from one tempo to another)', *biti u tempu* 'be in tempo', *ostati u tempu* 'stay in tempo', *prekoračiti tempo* 'cross over the tempo', *odstupiti od tempa* 'step away from the tempo' or *ući u ubrzan tempo* 'enter the accelerated tempo'. All these collocations have high terminological potential.

4. Conclusions

Among the collocations of musical terms extracted from the observed general and specialized corpora, only several categories display terminological potential. In order to determine which collocations can be considered conceptually and linguistically reproducible so that they are not only viewed as figurative expressions in musical discourse, but as proper figurative terms as well, most frequent collocations of the terms *melodija* 'melody', *akord* 'chord', *ritam* 'rhythm' and *tempo* 'tempo' have been compared. Potential figurative terms contain one or both constituent elements that are musical terms themselves, the meaning of which should change in a collocation.

Figurative collocations from the general corpora were compared to those from a specialized corpus. Among them, collocations with figurative meanings that are present in both examined corpora have generally displayed higher potential for the formation of phrasal terms. Specific ways of conceptualization underlying phrasal terms include personification, the VERTICALITY and the MUSICAL LANDSCAPE schemas, various conceptual metaphors (A CHORD IS A BUILDING, A MUSICAL ELEMENT IS AN ACTOR, RHYTHM IS AN OBJECT, TEMPO IS A CONTAINER), and metonymy (synecdoche). Collocations composed following the noun + noun and verb + noun patterns showed most potential for the formation of phrasal terms.

Unlike phrasal terms, other collocations consisting of terms, as well as free structures, often lack either specific figurative content that semantically distinguishes the meaning of the phraseme from the sum of meanings of its constituent parts. Phrasal collocations composed of an adjective and a noun, of which neither implies figurative meaning, are least likely to become phrasal terms.

Corpus management tools enable efficient determination of fixedness or reproducibility of multiword terminological units. Contextual definitions provided by such tools enable register and semantic determination as well as easy sorting of the extracted constructions. However, in spite of a large number of figurative collocations in all corpora examined in this research, the examples of shared phrasal terms remain considerably rare. An experienced field expert may notice certain cases where the corpus management tools did not extract some typical figurative terms from the specialized corpus, which may point to the disproportion of total numbers of tokens in general corpora compared to those in specialized corpora. Finding the way to overcome such inconsistencies may represent a possible avenue for further research in the field of computational terminology.

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Corpora

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Reproduzierbarkeit figurativer Termini im musikalischen Diskurs

Zusammenfassung

Der Artikel analysiert das terminologische Potential der kroatischen figurativen Mehrwort-Einheiten (Kollokationen) mit musikalischen Grundbegriffen *melodija* 'Melodie', *akord* 'Akkord', *tempo* 'Tempo' und *ritam* 'Rhythmus'. Durch eine Untersuchung von Konkordanzen der genannten Termini in den kroatischen Nationalkorpora (des Kroatischen Nationalkorpus HNK, des Kroatischen Netzkorpus hrWaC und des Kroatischen Sprachkorpus *Riznica*), sowie in einem von den kroatischen Musikfachzeitingen *Arti musices* und *Theoria* zusammengesetzten Spezialkorpus, wurden derartige figurative Mehrworttermini extrahiert, die sowohl im wissenschaftlichen Register wie auch im Alltagssprache verwendet werden. Aufgrund des Begriffsinhalts der extrahierten Kollokationen wurde es festgestellt, welche von denen als begrifflich und sprachlich reproduzierbar angesehen werden können, bzw. nicht nur als figurative Ausdrücke im musikalischen Diskurs gelten, sondern als wahre figurative Mehrworttermini gekennzeichnet sein können.