Theory of lexical motivation in Slovak lexicology Martin Ološtiak, Prešov University

The aim of the paper is to present the fundamental principles of the theory of lexical motivation, as it was introduced by Furdík (2008), and further developed by some of his students (e.g. Ološtiak 2011, Gavurová 2013). The first part introduces the cornerstones of the theory – anthropomorphization, parameterization, relation between arbitrariness and motivation, lexeme as a linguistic sign, onomasiological principle, motivational typology. The second part clarifies and discusses methodology (semiotics and lexical motivation) and possibilities for further research into the field (motivational typology and relationships between types of motivation – cooperation, determination, incompatibility).

Keywords: *lexicology, lexical motivation, arbitrariness, relationships, cooperation, determination, incompatibility.*

1. Introduction

The author of this unique theory, Juraj Furdík (1935-2002), was a Slovak linguist who focused mainly on word-formation (Furdík 1971, 1993, 2004). His theory of word-formation was based on the principle of **word-formation motivation**. In his view, word-formation motivation is a process, relation and a feature at the same time. It is a process of coining a new word (i.e. one-word lexical unit), it is a synchronically conceived formal and semantic relation between an underlying (motivating) word and a coined (motivated) word, e.g. Slk. *stôl* 'table'> *stolík* 'small table'. It is also a feature of a motivated word.

In the last decade of his life Furdík began to develop a theory based on the principle of word-formation motivation, which he significantly elaborated. From the understanding of word-formation motivation as the most important factor that structures and dynamizes the lexicon, Furdík moved to the notion of **lexical motivation**.

The theory of lexical motivation (TLM) is one of the possible approaches to exploring the lexicon. During his life Furdík published only two short, very similar papers on this subject (Furdík 1997/1998; 2000). His TLM was presented most comprehensively at lectures on Slovak lexicology (Faculty of Arts, University of Prešov) between 1997 and 2002. Due to his premature death he did not manage to complete his considerations. Furdík's approach is described in detail in the posthumous *Teória motivácie v lexikálnej zásobe* [*Theory of motivation in the lexicon*] (Furdík 2008; edited by Ološtiak). This publication also contains an overview of the development of Furdík's views on the issue (Ološtiak 2008: 11-23).

The aim of this paper is to introduce TLM as proposed by Furdík (part 1) and to summarize efforts in developing the theory (part 2).

2. Juraj Furdík and his theory of lexical motivation

2.1 Introductory remarks

According to Furdík (2008: 28 ff.), the existence of each lexical unit and the lexicon as such is based on three basic principles: anthropomorphization, parameterization and motivation. The first two principles have a supporting function, therefore, most attention is paid to the third principle, to motivation.

2.1.1 Anthropomorphization

The anthropomorphic principle can be referred to as an analogy between a lexical unit and a human being, between the lexicon and human society. The similarities can be viewed through the following properties (Furdík 2008: 28-29):¹

(a) Impossibility of accurate quantification. It is impossible to state the exact number of lexemes,² or the exact population of mankind.

(b) Individuality. Both human beings and lexemes are unique individuals. There exist no two identical individuals in human society or in the lexicon.

(c) Bilaterality. Both human beings and lexemes are bilateral in nature (a lexeme having a form and meaning, a human being having physical and mental facets).

(d) Involvement in relationships. Both human beings and lexemes are integrated into various relationships. People enter diverse biological and social micro- and macrostructures. Similarly, a lexeme is part of a number of paradigmatic and syntagmatic structures as a potential (in abstracto) and real (in a particular communication situation) bearer of significant roles in communication.

e) Existence in time. Human beings exist in time, are subject to biological, physical and mental development. Similarly (although in different temporal dimensions), lexical units are subject to changes, too.

2.1.2 Parameterization

The term parameterization has its origins in phraseology, where the parameters of phraseology (i.e. all relationships that can be investigated in phraseological system) are discussed (cf. Ďurčo 1991). The notion of parameterization can also be found in derivatology, namely in the project of word-formation dictionary in Slovak, e.g. parameters such as word class, stylistic characteristics, motivating unit, motivated unit, specification of a base, specification of an affix, etc. (Furdík 2004: 126-137).³

¹ An attempt to develop Furdík's reflections on this topic can be found in Ološtiak (2009a).

 $^{^2}$ The terms *lexeme, lexical unit, lexical item* are used synonymically and interchangeably in the sense 'an abstract unit, a set of word forms with identical lexical meaning'.

³ The method of parameterization was also used at lectures in lexicology delivered by Furdík. A set of parameters that can be observed in the lexicon was summarized on a poster serving as a learning aid for students. The following paradigmatic, syntagmatic and pragmatic parameters of a given lexeme were included: pronunciation, morphemic structure, grammatical characteristics, word-formation properties, semantic structure, interlexematic relations (synonyms, antonyms, hyperonyms and hyponyms), frequency, collocability, occurrence in multi-word expressions.

2.1.3 *Motivation*

Obviously, Furdík's theory is not an out of the blue approach in all details. Traditionally defined are three types of motivation: phonetic motivation, semantic motivation and word-formation motivation (e.g. Dokulil 1962: 103). Furthermore, the concept of syntactic motivation appeared in the Czech linguistics in the 1960s (Kuchař 1963) and in Slovakia the concept of paradigmatic motivation was introduced (Dolník 1985, 1990, 2003).

A wider understanding of motivation is also mentioned in the paper *Princíp motivácie vo frazeológii a v derivatológii* [Principle of motivation in idiomatics and derivatology] (Furdík 1994: 8–9). This work is the first published document where the germs of Furdík's effort to broaden the concept of motivation can be found. Furdík published his motivational theory in only two almost identical short articles (cf. above), merged into one text in Furdík (2005: 391-396).

Furdík's originality lies in the fact that he was the first to cover the previously defined motivational types and the first to formulate an ambition to describe and explain the principles on which the lexicon of natural language operates in a comprehensive way, using a unified methodology.

The starting point of TLM is to question Saussure's principle of semiotic arbitrariness. Furdík explicitly states: "It is not arbitrariness, but motivation of the linguistic sign that is absolute. Arbitrariness can be applied only to an isolated unit, and only from a form-to-content perspective." (Furdík 2008: 31-32). However, Furdík's attitude to a Saussurean semiotic model is not negative as his wording might seem.⁴ Furdík is fully aware that Saussure's view has a relativizing character: "Some signs are absolutely arbitrary; in others we note not its complete absence, but the presence of degrees of arbitrariness: the sign may be relatively motivated." (de Saussure 1959: 131). "Why is it so?" Furdík asks and once again answers by pointing to Saussure's statement:

Everything that relates to language as a system must, I am convinced, be approached from this viewpoint, which has scarcely received the attention of linguists: the limiting of arbitrariness. This is the best possible basis for approaching the study of language as a system. In fact, the whole system of language is based on the irrational principle of the arbitrariness of the sign, which would lead to the worst sort of complication if applied without restriction. But the mind contrives to introduce a principle of order and regularity into certain parts of the mass of signs, and this is the role of relative motivation. (de Saussure 1959: 133).

The difference between Saussure and Furdík is that while the former postulates the notion of relative motivation, the latter emphasizes absolute validity of motivation. Hence, Furdík's approach is based on two main, closely interrelated principles:

a) **Lexeme as a linguistic sign does not exist in isolation.** Furdík refers to ideas of Dolník (1990: 148) who maintains:

The arbitrary character of the relation between the signifier and the signified can be referred to only if the isolated linguistic sign is taken into consideration (i.e. when one

⁴ J. Furdík (2008: 32) asks a rhetorical question whether it would be more appropriate to consider Saussure's concept of arbitrariness to be a dogma.

abstracts from correlative signs) ... Linguistic sign not torn from its elementary, natural relation to other signs cannot be absolutely arbitrary.

In his argumentation, Dolník (1990: 149) extends the notion of motivation by defining the notion of paradigmatic motivation:

By motivation of a word is meant a direct or an indirect causal relationship between its form and meaning. This relationship is conditioned by the relation of a given lexeme to other, paradigmatically correlated lexemes.

Paradigmatically correlated lexemes constitute several types of lexical paradigms (e.g. synonymy, antonymy, homonymy, paronymy, etc.) and this interpretation also refers to Trier's *Zeichenfeldtheorie*. Subsequently, Furdík (2008: 20) claims:

Motivation is a multidimensional relationship, it is the determination by multidimensional relationships. This is the difference from the previous and slightly narrow understanding of motivation.

The notion of relationship can also be considered in other contexts (not only as a lexeme-to-lexeme relation), cf. 2.2.

b) **Onomasiological principle**. As Furdík points out, de Saussure's approach is semasiological and not onomasiological. Furdík puts in direct connection the onomasiological approach and the fact that a lexeme does not exist in isolation (Furdík 2008: 30):

From a semasiological point of view (form-to-content direction), the Slovak sound sequence K-R-A-V-A 'cow' is not in any causal connection with its referent. To the question "What is KRAVA?" the sound sequence itself gives no answer. From this point of view, any linguistic sign is undoubtedly arbitrary. It is also true even if a derived or a compound word is taken into account. We do not get a clear answer to the question "What is MUDRC 'sage'?" The word-formation structure of the word MUDRC can only provide us with a hint (semantic orientation) about the information concerning the referent 'someone who is wise', even in the case when the partner in communication already knows the meaning of the underlying word (in Slovak, adj. *múdry* 'wise' > noun *mudrc* 'sage'). Hence, this fact proves the claim that a word is not isolated.

A lexeme is not an isolated unit, therefore, in its analysis, an onomasiological approach (reflecting the natural direction of semiosis) is preferred. In this way, Furdík refers to Horecký's concept of linear onomasiological string (Slk. onomaziologický reťazec) (Horecký, Buzássyová, Bosák et al. 1989: 20-21). What is highlighted in Furdík's view is the fact that lexical motivation provides the opportunity of answering the question "Why does lexeme X have the particular form?" However, Furdík does not satisfactorily reflect the problem that arises with the postulation of individual types of motivation, i.e. the different nature of basic types and pragmatic type of motivation (cf. 1.2) with respect to the abovementioned question ("Why is lexeme X called so?").

Moreover, an important observation made by Dolník (2003) has to be mentioned here. Dolník draws attention to the fact that the notion of arbitrariness is usually put into direct opposition to the notion of motivation and, at the same time, into opposition to the notion of necessity (arbitrary = not necessary). Arbitrariness means that there is no casual relation between form and content of a linguistic sign. The relation between form and meaning is conventional (it is a matter of convention that the form *house* means 'a building that serves as living quarters' and not e.g. 'an implement for writing or drawing'). As Dolník claims, motivation represents the central element between arbitrariness (randomness, convention) and necessity (cf. Figure 1). For instance, it is not random what the Slovak words *nevýhoda* 'disadvantage' and *slovnikárstvo* 'lexicography' mean (*výhoda* 'advantage' > *nevýhoda* 'opposite of advantage', *slovník* 'dictionary' > *slovnikárstvo* 'a branch of linguistics dealing with dictionaries'). At the same time, the relationship between the form and the meaning of these lexemes is not indispensable. In Slovak, the meaning "opposite to advantage" can be expressed by the lexeme *hendikep* 'disadvantage, handicap' and the meaning 'a branch of linguistics dealing with dictionaries' can be expressed by the lexeme *lexikografia* 'lexicography'.⁵

ARBITRARINESS randomness convention MOTIVATION non-randomness non-necessity

NECESSITY

Figure 1 Relation between arbitrariness, motivation and necessity

2.2 Types of lexical motivation

In Furdík's approach, the heterogeneity of the relationships into which lexemes enter is reflected by the delimitation of several types of motivation. In addition to the abovementioned types (phonetic, semantic, word-formation, syntactic, paradigmatic), he eventually developed the following typology:

1. Basic types:

- 1.1 elementary paradigmatic motivation
- 1.2 specified types:
- 1.2.1 phonetic motivation
- 1.2.2 semantic motivation
- 1.2.3 morphological motivation
- 1.2.4 word-formation motivation
- 1.2.5 syntactic motivation
- 1.2.6 phraseological motivation

⁵ Similarly, the notion of motivation is perceived also by Holeš: "Motivation is not the opposite of arbitrariness or conventionalism, as is often observed. Motivation is the sum of all factors that make the structure of the word not random" (Černý, Holeš 2004: 51). This fact has been taken into account by Furdík as well: "If the relation between form and meaning is taken into consideration, most lexical units can indeed be said to be arbitrary, e.g. Slk. *voda* 'water', *zem* 'earth, soil', *otec* 'father', *hlava* 'head'" (Furdík 2008: 42).

This implies the difference in defining the essence of arbitrariness and motivation. Investigating the relation between form and meaning leads to arbitrariness, while the analysis of relations of the linguistic sign to other signs results in the concept of motivation.

1.2.7 onymic motivation
2. Pragmatic types:
2.1 expressive motivation
2.2 stratification motivation
2.3 terminological motivation
2.4 sociolectal motivation
2.5 territorial motivation
2.6 temporal motivation
2.7 individualizing motivation
3. Contact types:
3.1 acceptance motivation
3.2 abbreviation motivation

In the following section the particular motivational types, as defined by Furdík (2008), are briefly characterized. For further comments on typology and hierarchy cf. Ološtiak (2011).

First of all, let's briefly go back to Furdík who divides 17 types of motivation into three groups: (1) basic, (2) pragmatic, (3) contact (Furdík 2008: 33). Basic types constitute systemic relations of the lexicon (paradigmatics and syntagmatics, form and meaning, formation of new items). Basic types are further divided into elementary (paradigmatic) motivation and specified types. Pragmatic types can be viewed as a superstructure, they bring extralinguistic features to the lexicon (cf. extralinguistic relations in 2.1.1). Finally, as Furdík puts it, contact types enter the system of language, but at the same time they are: a) in contact with another language system (interlingual motivation), b) with another subcode – graphic subcode (abbreviation motivation) (Furdík 2008: 68-70).⁶

Paradigmatic motivation (PM). As mentioned above, the term paradigmatic motivation had been used by Dolník (1985; 1990: 145–161; 2003: 121–125). PM is a reflection of interlexematic relationships that each lexeme enters. It means that no lexeme is isolated, i.e. each lexeme is paradigmatically motivated. On this basis it can be argued that the principle of motivation is of general validity and, therefore, PM can be referred to as an elementary type of motivation.

The power of PM affects the position of a lexical unit in the lexical system (in the centre, in the transitional sphere, or on the periphery), and vice versa, the power of PM is influenced by the position of a lexical unit in the lexicon. Moreover, a lexical unit can be a member of several types of lexical paradigms that manifest its relationships to other lexical units: lexical field, synonyms (synonymic paradigm), antonyms (antonymic paradigm), homonyms (homonymy paradigm), hyponyms and hyperonymic (hyponymic and hyperonymic paradigm), paronyms (paronymic paradigm), word-formation paradigm (cf. Figure 5). As Furdík observes, relations between lexical units can be compared to those in a neural network.

⁶ Furdík's assumptions raise several questions, but here I do not discuss them in detail. I only draw attention to abbreviation motivation whose definition as a contact type is unclear. In his comments, Furdík probably explains contact at the level of subcodes (spoken vs. written type of communication). Spoken language is primary, that is why abbreviations seem to be imported from 'outside', from the sphere of written language (some abbreviations are used only in written form). The problem, however, is that: (a) from the synchronic point of view, written and spoken forms of language are considered to be equivalent, albeit functionally unequal and to some extent specialized; (b) according to Hrbáček (1979), there are two main groups of abbreviations: written abbreviations (abbreviated only in written form, e.g. Slk. *kpt*. 'captain'), written and spoken abbreviations (abbreviated both in written and spoken forms, e.g. Slk. *kilo* 'kilogram').

Phonetic motivation. This type is traditionally associated with onomatopoeia (imitative words) characterized by an 'immediate' relationship to a referent (a sound of extralinguistic reality, e.g. sounds of animals). Given the discrete nature of a linguistic sign and the fact that every speech sound is articulated, no onomatopoeia is a mirror reflection (or, a 'record'), but only an imitation of its referent. This means that some degree of arbitrariness can also be found in onomatopoeia, the arbitrariness in the sense of independence between the form of a word and its referent. This fact can be illustrated by:

a) the existence of variants in a given language, e.g. Slk. *hav-hav – haf-haf – d'af-d'af – vuf-vuf*, English *woof-woof – arf-arf – ruff-ruff – bow-wow*;

b) the existence of different (though similar to some extent) imitative forms in different languages, e.g. Slovak. *kikiriki*, English *cock-a-doodle-doo*, Hungarian *kukuriki*, French *cocorico*, German *kikeriki*, Dutch *kukeleku*. Russian кукареку (Krupa 1992, Hagège 1998: 119-120, Fidlerová 2004).

Furdík extended the scope of phonetic motivation. In his view, phonetic motivation is an indicator of markedness at the form (sound) level of a word. This approach enables him to include other types of lexical units into the sphere of phonetic motivation: a) expressive words with unusual sound structure suggesting expressivity, e.g. Slk. *galgan* 'a mischievous person, rascal', *fafrnok* 'a child; a very small person, shrimp'; b) loan words with a sound structure not typical for the recipient language, e.g. Slk. *teória* 'theory', *matematika* 'mathematics'.

Semantic motivation. Semantic motivation relates to polysemy. Semantically motivated are secondary meanings of polysemous lexemes in which a derivative relation (derivative polysemy) can be found: e.g. Slk. *hlava* 'a part of the human or animal body - head' > *hlava* 'a thing resembling a head - head'. Thus, semantic motivation is an indicator of the emergence of, or increase in polysemy.

Word-formation motivation. Word-formation motivation refers to the creation of new one-word lexemes on the basis of morphemic change of the existing lexemes, e.g. Slk. *kopat* 'to dig' > *kopáč* 'digger', *bledý* 'light' + *modrý* 'blue' > *bledomodrý* 'light blue'.

Morphological motivation. Morphological motivation is what in English linguistics is called conversion, i.e. morphologically motivated are lexemes coined by pure change of word class without any change in form, e.g. the Slk. verb form *cestujúci* (active participle of *cestovať* 'to travel') > noun *cestujúci* 'traveller'.

Syntactic motivation. Syntactic motivation is attributed to multi-word expressions having at least two autosyntagmatic components, i.e. having the form (structure) of a syntagm, or a sentence: e.g. Slk. *sprchovací kút* 'shower cabin', *Leje ako z krhly* 'It rains cats and dogs'.

Phraseological motivation. Phraseologically motivated are phrasemes, or idioms, expressive multi-word expressions with fixed and figurative meaning, e.g. Slk. *vraziť niekomu nôž do chrbta* 'to stab (someone) in the back', Slk. *len tak tak* 'by the skin of (one's) teeth'.

Onymic motivation. Onymically motivated are proper names, i.e. lexical units denoting unique and specific referent (person, place, institution, etc.), e.g. *Peter Gabriel, Helsinki, Tesco* (for brief description of onymic motivation cf. Ološtiak 2009b).

Acceptance motivation (M. Ološtiak (2011) prefers the term interlingual motivation). This type of motivation is a reflection of a contact principle. In the lexicon, the contact principle is reflected in the form of borrowing, i.e. lexemes pass from one language to

another. Interlingually motivated are loan words (e.g. Slk. *bluetooth*) and calques (e.g. Slk. *všemocný* 'almighty'; from Latin *omnipotens*).

Abbreviation motivation is a consequence of a specifically implemented economization principle in language. This type of motivation is involved in creating abbreviations: e.g. *USA*, *ml*. 'Jr.', *atd*'. 'etc.'.

Expressive motivation is viewed as the demonstration of emotional and subjective principle in language. Expressives (lexemes with expressive meaning) comprise subjective attitude of humans to extralinguistic reality. In this respect, markedness is considered to be the essential feature of expressivity (Zima 1961). As stated by Dolník (1987/1988: 289), unlike non-marked lexical units, expressives fulfill pragmatic functions. They activate the attention and perception of the recipients by means of markedness, especially at the form level. Markedness is indicated by other types of motivation, phonetic motivation (unusual sound structure, e.g. Slk. *frflat*' verbally (not quite strongly, vigorously, comprehensibly) to complain about something, grouch, grumble', *chmul'o* 'blockhead'), word-formation motivation (Slk. *Čech* 'Czech' > *Čech-úň* 'Czech + expressive suffix -*úň*'), and semantic motivation (Slk. *analfabet* 'poorly educated or uncultured, analphabet').

Stratification motivation. This motivation refers to the relationship between lexicology and stylistics. In this way, Furdík builds on the knowledge of the stylistic stratification of the lexicon (the term stratification motivation relates to Latin *stratum* 'layer'⁷). Stratification motivation is attributed to lexical units from various functional styles,⁸ and to lexemes typical for a particular variety or register (e.g. colloquialisms, journalistic expressions, words used in poetry, Bible words etc.).

Ološtiak (2010, 2011: 267-279) introduced the term **register motivation** referring to the notion (*communication*) *register* which is defined as situationally conditioned language behaviour of people connected by their common activity (Hudson 1980, Wardhaugh 1992, Slančová 1999). Register lexical units are thus situationally conditioned (such as child lexis, sport lexis etc.).

Terminological motivation is a result of the principle of accuracy in language. Terminologically motivated are terms that saturate the need for deeper knowledge of extralinguistic reality, e.g. Slk. *trias* 'Triassic period', *jura* 'Jurassic period', *krieda* 'Cretacerous period'. The term is a specific type of lexeme, 'a part of the lexicon denoting a particular notion specified by definition and by its place in the system of terms of a particular field of science, technology, economics and other activities' (Masár 1991: 29).

Sociolectal motivation. Sociolectal motivation is a result of the social principle in language. The concept of sociolectal motivation is based on the term *sociolect* which signals the link to the social structure of a language community (Odaloš 1997: 14). Sociolectal motivation relates to lexemes from social dialects (slang words, professionalisms, jargonisms).

Territorial motivation. Territorial motivation is a result of the geographical principle in language. Territorial motivation relates to groups of lexemes typical for a given territory, e.g. regional, or dialectal words such as Slk. *švábka, krumple, gruľe* 'potatoes'.

⁷ A different definition of the term *stratification* was introduced by Lamb who outlined the structural framework of stratificational grammar.

⁸ The term style (or, functional style) is based on the concept of functional stylistics developed by the Prague School and adopted into Slovak linguistics by Mistrík (1997) and others.

Temporal motivation. Temporal motivation is a result of the temporal principle in language. Time, metaphorically speaking, also intrinsically touches language units – their birth, adolescence, productive age, retirement age and extinction. Temporal motivation refers to two lexical groups: a) obsolete, old-fashioned words (archaisms, historicisms); b) new words (neologisms).

Individualizing motivation. Nonce-formations (occasionalisms) are motivated by means of individualizing motivation. This motivation is a result of the creative principle in language. The adjective 'individualizing' points out the fact that nonce-formations are coined individually (by a single member of a speech community) and their usage is usually restricted to a one and only communication situation, e.g. the Slovak blend *gernisáž* 'vernissage in a gallery' < *vernisáž* 'vernissage' + *galéria* 'gallery'.

3. Theory of lexical motivation and possibilities of its development

Furdík's theory inspired some of his direct and indirect disciples. For instance, Imrichová (2002) was one of the first linguists to adopt some of Furdík's assumptions (namely in the field of onomastic analysis of logonyms, i.e. the names of companies, shops, markets, institutions, etc.). Gavurová (2013) published a monograph focusing on abbreviation motivation, the first publication of its kind to comprehensively investigate abbreviation processes in Slovak lexicology. Additionally, Palková (2018), for the first time in Slovak linguistics, provides an in-depth examination of univerbization. However, Furdík's approach has been expanded in the most complex and comprehensive way by Ološtiak (e.g. 2011 and a series of articles).

In the following section some other aspects of TLM are introduced, including the methodology (2.1) and the relational aspects (2.2). The intention of this section is to clarify, discuss and develop some of Furdík's considerations.

3.1 Remarks on the methodology of LM

3.1.1 Lexeme as a linguistic sign

Based on the traditional Ogden and Richards' model of the linguistic sign (semiotic triangle), in a textbook on Slovak lexicology (Ondrus – Horecký – Furdík 1980: 33) the following model is proposed (the author of the respective chapter is J. Furdík):



Figure 2 Semiotic model in Ondrus – Horecký – Furdík (1980: 33)

Compared to Ogden and Richards', this model (Figure 2) presents important additional elements. First of all, it clearly indicates (by a rectangle) which elements constitute the linguistic sign (form and meaning). Secondly, relationships into which the lexical sign (S_1) enters are illustrated. In particular, there are: a) relationships to other signs (S_2) at paradigmatic level (structural relationships 1) and to other signs (S_3) at syntagmatic level (structural relationships between the lexical sign and language users (pragmatic relationships). This model is a basis for the model introduced by Ološtiak (2011: 22-23), Figures 3 and 4:



Figure 3 Semiotic model in Ološtiak (2011: 22)⁹

In this approach, the linguistic sign (lexical unit) is bilateral. The relationship between the form and meaning of the sign is intralexematic because it operates inside the lexical unit. The lexical sign enters into relationships with other lexical signs at the paradigmatic level (Eng. synonyms big - enormous - gigantic..., antonyms big - small) as well as at the syntagmatic level (*Eng. big boy, a big storm*). Paradigmatic and syntagmatic levels are mutually interconnected (e.g. *a big boy - a fat boy, a big storm - *a fat storm*). In the model, the interconnection is indicated by a dashed line. Intralexematic and interlexematic relationships are of a linguistic nature because they operate within the language system.

There are two more types of lexematic relationships having their nature outside the language: a) extralinguistic relationships, b) paralexematic relationships. The difference between the two is that each lexical unit has its referent (paralexematic relationship is obligatory), while extralinguistic entities do not necessarily have to be manifested in every lexical unit (extralexematic relationships are facultative¹⁰). The active presence of extralinguistic relationship in a lexical unit is a prerequisite for markedness, peculiarity, cf. specific groups of lexemes restricted to a particular variety, communication situation, region, etc. (slang words, colloquial words, nonce-formations, terms, expressive words, neologisms, regional words).

 $^{^{9}}$ F – form, M – meaning, R – referent, IaL – intralexematic relationships, IeLp – interlexematic relationships at paradigmatic level, IeLs – interlexematic relationships at syntagmatic level, ExL – extralexematic/extralinguistic relationships, PL – paralexematic relationship.

¹⁰ This fact is indicated by a dashed line, cf. Figures 2, 3, 4.

In sum, there are four kinds of relationships into which lexical units enter (or, may enter); cf. Figure 4. Each kind of relationship individually determines the status of a lexical unit.



Figure 4 Relationships of lexical sign

Let us briefly illustrate the above-mentioned considerations. For instance, the Slk. lexeme *ruka* 'the body part at the end of the arm, hand' enters the following relationships (see also Figure 5):

1) Intralexematic relation between the form *ruka* and the meaning 'the body part at the end of the arm' is part of a complex of relations between one form and several meanings assigned to this form (the lexical unit *ruka* in Slovak as well as its English equivalent are polysemic).

2) Interlexematic relations:

a) paradigmatic relations:

aa) conceptual relations (lexical field: *human body*): *ruka* 'hand' :: *telo* 'body', *hlava* 'head', *dlaň* 'palm', *laket* 'elbow', etc.;

ab) synonymic relations: *ruka* 'hand' :: expressive *laba* 'big and strong hand', expressive *packa* 'small hand (usually in child language and in child directed speech)', etc.;

ac) paronymic relations: ruka 'hand' :: muka 'anguish' :: suka 'bitch';

ad) word-formation relations: ruka 'hand' > rúčka 'small hand (diminutive)', ruka 'hand' > ručisko 'big hand (augmentative)', ruka 'hand' > ručný 'manual', ruka 'hand' + pisat' 'write' > rukopis 'manuscript', etc.;

b) syntagmatic relations – lexeme *ruka* as a part of collocations and sentences: *čisté ruky* 'clean hands', *držať sa za ruky* 'to hold one's hands', *Pobozkal jej ruku*. 'He kissed her hand'.

3) Paralexematic relation to a particular referent (in Figure 5 represented by the picture).

4) Extralexematic relations. There are no extralexematic relations because *ruka* is a neutral lexeme. It could not be referred to as a slang word, expressive word, neologism, nonce-formation, etc.



It was the diversity of relationships into which lexical units enter (or, may enter) that gave Furdík an impetus to delimitating 17 types of lexical motivation.

Figure 5 Relations of lexeme ruka 'hand'

3.2 Remarks on relational aspects of lexical motivation

It is important to stress that the individual types of lexical motivation do not work 'on their own' but enter various relations with each other. J. Furdík reflected this aspect only implicitly (cf. 2.2.1). In Ološtiak (2011), this fact is reflected in the term **motivational relationship** (MR). The description and explanation of the principles of how motivational relationship works are a very important, and in some sense fundamental aspect of TLM. In general, the most significant advantage of this facet of TLM is the fact that in this way various lexical phenomena can be analysed from a homogeneous theoretical and methodological platform. This is the way how both static (types of lexical motivation in relation to features of lexical units) and dynamic aspects (various types of change in the lexicon) can be examined.

MR is manifested as: (1) cooperation; (2) determination; (3) incompatibility. In addition, MR can be depicted from static and dynamic points of view. Cooperation and incompatibility can be characterized both as static and dynamic phenomena, whereas determination has a dynamic nature (cf. Figure 6).



Figure 6 Dimensions of motivational relationship

3.2.1 Motivational cooperation

Motivational cooperation is manifested as the presence of two or more types of motivation in one lexical unit (static perspective), or in the formation of a lexeme (dynamic perspective). Furdík demonstrates this aspect implicitly in the paper *Slovotvorná motivácia medzi ostatnými typmi lexikálnej motivácie* [Word-formation motivation and other types of lexical motivation] (2000, 2005: 391-396). The interaction of motivation types is illustrated by several examples (without any further commentary); e.g. *trolejbus* 'trolleybus' (paradigmatic + word-formation + interlingual motivation), *antiglobalizačný* 'relating to anti-globalisation' (paradigmatic + word-formation + temporal + interlingual motivation) (Furdík 2005: 396).¹¹ Static and dynamic aspect of motivational cooperation is defined by Ološtiak (2011).

3.2.1.1 Static aspect

The static aspect can be exemplified by the following lexical units (Ološtiak 2011: 35-36):

¹¹ Moreover, the author observes that (a) the smallest number of types is found in lexemes from the centre of the lexicon (lexical units such as *matka* 'mother', *otec* 'father', *byt*' 'to be', *vidiet*' 'to see', *dobrý* 'good', *mladý* 'young', *jeden* 'on'', *on* 'he' are neutral, non-expressive, only paradigmatically motivated); b) the central role is played by word-formation motivation (lexical phenomena documenting the cooperation of word-formation motivation with other types are briefly mentioned).

doštekať 'to stop barking': paradigmatic motivation (e.g. relations with verbs *štekať* 'to bark', *miaukať* 'to mew', *erdžať* 'to neigh', etc.), word-formation motivation (deverbal prefixal verb: *štekať* 'to bark' > *do-štekať* 'to stop barking');

doštekať 'to stop screaming, or swearing': paradigmatic motivation (e.g. relations with verbs *kričať* 'to scream', *revať* 'to scream', etc.), semantic motivation (cf. semantic derivation: to stop barking > to stop screaming, or swearing), expressive motivation (pejorative word);

green '(in a golf game) the area with a hole specially prepared for putting': paradigmatic motivation (e.g. relations with nouns *jamkovisko* 'Slovak synonym of Anglicism green, birdie, putt, etc.), interlingual motivation (lexeme borrowed from English), register motivation (golf register);

ditrochej 'double trochee': paradigmatic motivation (e.g. relations with nouns denoting various types of metrical feet: *trochej* 'trochee', *daktyl* 'dactyl', *jamb* 'iamb', etc.), terminological motivation (literary theory terminology), word-formation motivation (*trochej* > *di-trochej*: prefixal derivation), interlingual motivation (borrowed from French < Latin < Greek), phonetic motivation (for Slovak language unusual phoneme combination [d] + [i]);

Ján 'John': paradigmatic motivation (e.g. relations with other first names: *Jozef* 'Joseph', *Peter, Adam*, etc.), onymic motivation (proper name – anthroponym – first name);

Janči 'Johnny': paradigmatic motivation (e.g. relations with other hypocoristic names: e.g. *Jožo* 'Joe', *Peto* 'Pete' etc.), onymic motivation (proper name – anthroponym), wordformation motivation (*Ján* > *Jan-či*, suffixal derivation) register motivation (colloquial register);

Národná banka Slovenska 'National Bank of Slovakia': paradigmatic motivation (e.g. relations with other names of banks: *Československá obchodná banka* 'Czechoslovak commercial bank', *OTP Banka Slovensko* 'OTP Bank Slovakia', etc.), onymic motivation (proper name – chrematonym), syntactic motivation (multi-word expression), word-formation motivation (component *národ* 'nation' > *národný* (*národná* adj. fem.) 'national');

USA: paradigmatic motivation (e.g. relations with other names of countries: e.g. *Canada, Mexico*), onymic motivation (proper name – toponym – name of country), abbreviation motivation (*The United States of America* > USA), interlingual motivation (lexeme borrowed from English).

3.2.1.2 Dynamic aspect

The dynamic aspect relates to the formation of lexical units. It is manifested in the form of the simultaneous acquisition of two or more motivation types, e.g.:

profák 'slang word for professor': word-formation motivation + abbreviation motivation: *profesor* > *prof-ák* (suffixal derivation + shortening);

ryžojed 'inhabitant of Asia, a person of the Mongoloid race': word-formation motivation: *jest' ryžu* 'eat rice' > *ryžojed* 'one who eats rice' (compounding + derivation), expressive motivation (a pejorative word).

3.2.1.3 Further research into cooperation

Finally, further possibilities of research into cooperation can be indicated by the following questions and brief comments:

a) **Cooperation rules**. Are there any rules that regulate cooperation? Yes, there are. These rules are based on general lexical facts. For instance, extralinguistic (pragmatic) types of motivation cannot exist on their own because they do not have a nomination function. There must be at least one basic type of motivation present in a lexeme.

b) **Cooperation hierarchy**. Is it possible to consider the existence of hierarchical arrangement (in terms of dominance – subdominance) of cooperating motivation types? Yes, it is. For instance, in a cluster of paradigmatic and phraseological motivation, paradigmatic relations of idioms/phrasemes, are specific, phraseologically determined (Ološtiak 2011: 162-169). It means the dominance of phraseological motivation and the subdominance of paradigmatic motivation. The relationship between onymic and paradigmatic motivation can be characterized in a similar way (dominance is a property of onymic motivation).

c) **Cooperation configurations**. Are there any motivation configurations? Are there any groups of lexical units characterized by the same arrangements and relationships within a motivation cluster (hierarchically arranged motivation types that cooperate)? Standardized configuration of motivation clusters to some extent reflects the character of some groups of lexical units. For example, inherently expressive words are characterized either by the cluster expressive motivation + phonetic motivation (cf. examples above: Slk. *frflat*' verbally complain about something, grouch, grumble', *chmulo* 'blockhead'), or expressive motivation + word-formation motivation (Slk. *Čech* 'Czech' > *Čech-úň* 'Czech + expressive derogatory suffix -úň'). Adherent expressive words are characterized by cluster expressive motivation + semantic motivation (Slk. *somár* with secondary meaning 'asshole', primary meaning is non-expressive: 'donkey').¹² Nonce-formations (occasionalisms) are characterized by cluster individualizing motivation + temporal motivation + expressive motivation + (usually) word-formation motivation.

d) **Potential of cooperation**. What role is played by the cooperation of 'attractivity' and the potential of cooperation between types of motivation? Some motivation types are closer to each other when compared to other ones (the opposite pole – the maximum 'intolerance' – is represented by motivational incompatibility; cf. 2.3.3). For instance, word-formation motivation is important for individualizing motivation (most of nonce-formations are coined by means of word-formation), expressive motivation closely cooperates with phonetic, word-formation and semantic motivation; terminological motivation intensively cooperates with word-formation motivation, syntactic motivation and interlingual motivation (in Slovak, most terms are multi-word expressions and loans). There are close affinities between phraseological motivation and syntactic motivation (most of idioms are formally syntagms and sentences).

These aspects (rules, hierarchy, configurations, potential) are important indicators of the place and function of individual types of motivation in the structure of the lexicon. This is a complex of issues to focus on in future.

3.2.2 Motivational determination

Motivational determination is connected with motivational dynamics. Determination in this sense means that the acquisition of a motivation type X is accompanied by the change, weakening, or loss of a motivation type Y.

For instance, the process of univerbization as such can be characterized within the framework of motivational determination. Univerbization is the process of change of a multi-word expression into a synonymous one-word expression. In terms of TLM, this change can

¹² Inherent and adherent expressivity is analysed by Zima (1961).

be referred to as the loss of syntactic motivation (syntactic demotivation). Subsequently, based on the acquisition of a particular type of motivation, four types of univerbization are distinguished:

1) elliptical univerbization (one-word expression is the result of mere omitting of a word in a multi-word expression): e.g. krstný otec 'god-father' > krstný 'god-father'; the loss of syntactic motivation is accompanied by the acquisition of morphological motivation – adjective krstný from a multi-word expression is converted into a noun: krstný otec (adjective + noun) > krstný (noun);

2) word-formation univerbization (one-word expression is a result of omitting a word accompanied with a word-formation process, often suffixation): e.g. *slepé črevo* 'vermiform appendix' > *slep-ák* 'vermiform appendix'; the loss of syntactic motivation is accompanied by the acquisition of word-formation motivation: *slepé črevo* (adjective + noun) > *slep-ák* (base+suffix);

3) abbreviation univerbization (one-word expression is a result of shortening): e.g. *very important person* > *VIP*; the loss of syntactic motivation is accompanied by the acquisition of abbreviation motivation;

4) semantic univerbization (secondary meaning of one-word lexeme is synonymous with the meaning of multi-word expression): e.g. *skok o žrdi* 'pole vault – a track and field event' > zrd' 'pole vault'; the loss of syntactic motivation is accompanied by the acquisition of semantic motivation (primary meaning of Slk. zrd' is 'bar; flagpole', the secondary meaning is 'pole vault').

It should be added that the process of univerbization is often accompanied by the acquisition of pragmatic (extralinguistic) types of motivation because in most cases one-word expressions (univerbized units) are not stylistically neutral: *krstný* 'god-father' is colloquial (register motivation), *slepák* 'vermiform appendix' is a slang word (sociolectal motivation).

3.2.3 Motivational incompatibility

Motivational incompatibility is understood as the impossibility of the simultaneous presence of two or more types of motivation in a given lexical unit. For example, incompatible are the following pairs: expressive motivation – terminological motivation, phraseological motivation – terminological motivation. For instance, incompatibility of phraseological motivation and terminological motivation lies in the fact that phraseological motivation is based on expressivity, subjectivity, whereas terminological motivation relies on objectivity.¹³

¹³ Following this idea, terms with figurative meaning such as Eng. *pill rolling tremor* (a medical term defined as "the tremor of the fingers, usually the thumb plus the other fingers, that makes it look as if the person is rolling a pill in the fingers'; cf. https://www.apdaparkinson.org/what-is-parkinsons/symptoms/tremor/) are not considered to be phrasemes. Figurativeness and expressivity are neutralized by features typical for terminology: a term is exactly defined having special reference and place in a specialized field. In this sense, from the synchronic point of view, lexical units with two meanings (one belonging to terminology and other having idiomatic nature) are treated as two independent (homonymous), though historically related items, e.g. Slk. *refazová reakcia* 'chain reaction' (a term in chemistry "nd physics: 'a type of nuclear reaction') – *refazová reakcia* 'chain reaction' (idiom: 'a series of related events in which each one influences the next').

4. Conclusion

Furdík's theory of lexical motivation represents an original and inspiring contribution to linguistics and lexicology. TLM can definitely be characterized as essentially a structuralist one. It rests upon the ideas of the lexicon as a system consisting of mutually interconnected elements. There can be identified three sources that gave an impetus for the TLM: 1) disagreement with Sasussure's semiotic concept based on arbitrariness of the linguistic sign; 2) viewing lexical signs from an onomasiological perspective; 3) adopting the concept of paradigmatic motivation introduced by Dolník.

However, it can be seen as a paradox that TLM is structuralist even in those aspects where the structuralist approach is transcended, i.e. when delimiting extralinguistic (pragmatic) types of motivation (TLM aims at finding a system in pragmatic dimensions of the linguistic sign).

Another important feature of TLM is holism. Its ambition is to explore the lexicon from all points of view (paradigmatic, syntagmatic, pragmatic; linguistic, extralinguistic), all types of lexical units in all types and fields of verbal communication, all types of relationships between lexemes. The theory takes into consideration both synchronic and diachronic perspectives. Moreover, it provides significant stimuli not only to general linguistics, but also to interdisciplinary (e.g. semiotic) research, and it represents an important contribution to the discussion on the character of the linguistic sign.

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Acknowledgements: This paper has been supported by the VEGA grant agency, grant no. 1/0083/19. I am grateful to anonymous reviewers for providing constructive suggestions for improving the manuscript.

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In SKASE Journal of Theoretical Linguistics [online]. 2019, vol. 16, no. 3[cit. 2019-11-30]. Available on web page http://www.skase.sk/Volumes/JTL41/pdf_doc/08.pdf. ISSN 1336-782X