### **ŠTÚDIE / ARTICLES**

# Metaphor and metonymy in cognitive linguistic theory: On the basis of evidential adverbs and their semantic extensions\*

## MARTINA IVANOVÁ

## **1. INTRODUCTORY REMARKS**

The publication of *Metaphors we live by* (1980) by George Lakoff and Mark Johnson played a significant role in establishing metonymy as a category distinctive to metaphor (in spite of the fact that there is only a single chapter dedicated to metonymy in the work). Since Lakoff and Johnson's work was published, metonymy has stopped being regarded as peripheral to metaphor, and not only that: according to some authors, metonymy even plays a more fundamental role than metaphor and it is more pervasive than has generally been noted. Nevertheless, the distinction between metaphor and metonymy is considered notoriously difficult in linguistic theory, both in the theoretical explanation and in its application, as the difference existing between them is often blurred.

Metaphor and metonymy have been usually contrasted with respect to five points of difference (Brdar-Szabó – Brdar 2011, 218):

1. The nature of the relationship existing between the vehicle/source and the target: metaphor is seen as resting on similarity whereas metonymy is claimed to be based on contiguity, proximity or indexical reasoning (Taylor 1989, 122). Panther and Thornburg (2002, 280) constrain the scope of metonymy: the relation between metonymic source and target is contingent, yet it does not exist by conceptual necessity. However, in the work by Barnden (2010) it is argued that metaphorical links can be used metonymically and regarded as contiguities, and conversely that certain types of metonymic contiguity essentially involve similarity. Similarity and contiguity are hence viewed as two independent scales that may in principle be applied to the same expressions or concepts.

2. Another important point is whether the mapping takes place across distinct conceptual domains or within a single domain (idealized cognitive model, frame, script, scenario, etc.). A common definition of metaphor in conceptual metaphor theory is that in metaphor we conceptualize one domain in terms of another (Lakoff – Johnson 1980, 117). In metonymy, "an element in a domain, or frame, provides mental access to another element within the same domain, or frame" (Kövecses

<sup>\*</sup> This work was supported by the Scientific Grant Agency VEGA on the basis of contract no. 1/0099/16 "Personal and social deixis in Slovak (humans in language, language on humans)".

2013, 75). Metaphor is a relationship between two conceptual domains and employs inter-domain mapping; metonymy, on the contrary, is defined as involving only one conceptual domain and employs intra-domain mapping. However, according to Taylor (2002, 196–197) it would be an error to suppose that domains constitute strictly separated configurations of knowledge; typically domains overlap and interact in numerous and complex ways. According to Croft (2003, 180), the cases where metaphor and metonymy are difficult to distinguish are those where it is not clear whether we are dealing with one domain (or frame) or two.

3. Directionality of mapping: metaphorical mappings are unidirectional, they typically employ more concrete domain or concept as the source and more abstract domain or concept as a target. On the other hand, there exist metonymies like CAUSE for EFFECT or EFFECT for CAUSE but it is more appropriate to understand them as two distinct metonymies, not as a single metonymy with bidirectional mapping. In addition to that, Handl (2011) has shown that there are examples of metonymy lacking the kind of directionality that is inherent in some other models of prototypical metonymy. In a sentence like *Polícia zastavila BMW* (The police stopped the BMW), it is not entirely clear what is being referred to by the noun phrase *BMW*. In this example, *BMW* refers to both the car and the driver, having the meaning that is underspecified. In these metonymies, the basic sense of the vehicle is retained and contributes to the contextual meaning of the expression.

4. Conceptual metaphors are characterized by a set of systematic conceptual correspondences, whereas metonymic mapping is based on a single correspondence. According to Ruiz de Mendoza Ibáñez and Díez Velasco (2002, 493), metonymies are always one-correspondence mappings. Nevertheless, one-correspondence mappings can be used also within metaphor (so called resemblance metaphors).

5. Different functions: Lakoff and Johnson (2003, 36) state that metaphor is principally a way of conceiving of one thing in terms of another, and its primary function is understanding, whereas metonymy has primarily a referential function, that is, it allows to use one entity to stand for another. The metaphoric relationship is illustrated by the notation X IS Y, while the metonymic relationship is presented as the X FOR Y pattern. Nevertheless, Barcelona (2003, 84) asserts that viewing metonymy as a type of mapping is more adequate than seeing it as a "stand for" relationship, since "the source does not necessarily substitute unambiguously for the target: it merely activates it from a given perspective". However, Croft (1993, 364) uses the term "domain highlighting" instead of the term "mapping" as metonymy involves a shift of reference. Panther and Thornburg (2003a, 2) maintain that metonymy, in line with the cognitive linguists' view of metonymy, is better viewed as a cognitive trigger providing access to a targeted concept.

As the result of the presented problems it is often difficult to say, apart from prototypical cases, whether a given linguistic instance is metaphorical or metonymic. Many intermediate notions regarding the unclear boundary existing between these two phenomena have arisen: metaphtony (Goosens 1990, 323), pre- or post-metonymy and pre- and post-metaphor (Riemer 2002, Dirven 2002), metonymic expansion or reduction metaphorical source or target (Barnden 2010), etc. Many authors (e. g.

Radden 2000) propose the existence of a metaphor-metonymy continuum, e. g. Radden (2005, 24) gives examples with the adjective *high* which form a cline: *high tower* is literal, *high temperature* is metonymic and *high quality* is metaphorical.

## 2. THE NATURE OF THE EXTENSION "SEE - KNOW"

In recent years, the linguistics community has been divided on how to describe semantic extensions like the sense of *see*, meaning "know/understand". Some attribute the extension *see* "know/understand" to metaphor, while others ascribe changes of this type to the metonymic process called invited inferencing, also termed pragmatic inference or metonymic extension via inference, cf. Sullivan (2007).

The metaphor-metonymy continuum will be demonstrated by the usage of evidential units such as *očividne, zjavne, evidentne* (obviously, apparently, evidently, etc.) which show a development from literal visual perception meaning through metonymy-based inferential meaning to the meaning of assumption, knowledge. Their semantic extension can be described as an example of "correlation metaphors" or "primary metaphors" (see, e. g., Grady 1997, Lakoff – Johnson 1980) which arise from metonymies. A metonymy-based metaphor can be defined as "a mapping involving two conceptual domains which are grounded in, or can be tracked to, one conceptual domain" (Radden 2000, 93).

The evidential units were investigated on the basis of corpus frequencies in the Slovak National Corpus (corpus version prim-8.0-public-all, 2018).<sup>1</sup>

## 3. EPISTEMIC MODALITY AND EVIDENTIALITY

Units like *očividne, zjavne, evidentne* (obviously, apparently, evidently) are usually classified as evidentials. In this article evidentiality is seen as a functional-semantic (conceptual) domain whose function is the "indication of nature of sources of information for making a statement" (Nuyts 2006, 10). D. Crystal asserts:

Evidential constructions express a speaker's strength of commitment to a proposition in terms of the available evidence (rather than in terms of possibility or necessity). They add such nuances of meaning to a given sentence as "I saw it happen," "I heard that it happened," "I have seen evidence that it happened... (though I wasn't there)", or "I have obtained information that it happened from someone else" (2008, 176–177).

Evidentiality is often analysed as closely related to epistemic modality. Simply speaking, epistemic modality represents a speaker's evaluation/judgment of, degree of confidence in, or belief of the knowledge upon which a proposition is based. It refers to the way speakers communicate their doubts, certainties, and guesses. In other words, epistemic modality concerns an estimation of the likelihood that (some aspect of) a certain state of affairs is/has been/will be true (or false). This estimation of likelihood is situated on an epistemic scale going from certainty that the state of affairs applies, via a neutral or agnostic stance towards its occurrence, to certainty that it does not apply, with intermediary positions on the positive and the negative sides of the scale (Nuyts 2001, 21–22).

The relationship of epistemic modality and evidentiality is twofold. From an onomasiological point of view, they can be seen as two distinct cognitive domains. How-

ever, they are not fully independent. Epistemic judgement is dependent on the type of source of information: simply speaking, the degree of our belief of the proposition to be true has usually something to do with the reliability of the source of information. On the other hand, it frequently happens that the simple fact of indicating the source of evidence for a proposition is interpreted as implying to what measure the speaker subscribes to the veracity of the given proposition. In the theoretical literature, there is an assumption that certain evidentials are perceived to be stronger than others, e. g. units associated with vision are perceived to be stronger or more reliable forms of indicating an information source than units indicating auditory or tactile evidence. Sensory evidence is stronger than indirect evidence, etc.

## 3.1. The meaning of direct perception

The default meaning of *očividne*-type units can be described as "direct visual perception". In the following sentences they are used in their literal meaning.

- (1) Speaker looking at somebody: *Evidentne má obe ruky v dlahách.*(Obviously he has both hands in splints.)
- (2) [Jeho meč] Bol očividne menší ako meče ostatných.
   ([His sword] It was obviously smaller than the swords of the others.)

Direct perception is connected with processes which are physically manifested and thus perceptually accessible (especially events of motion, manipulation with objects or modification of objects, location of objects, etc.):

- (3) *Lopta je evidentne za bránkovou čiarou.* (The ball is evidently behind the goal line.)
- (4) *Trolejbus je evidentne preplnený.*(The trolleybus is evidently overcrowded.)
- **3.2.** The meaning of perception-based inference On the other hand, these units can be also used in contexts like (5).
- (5) Očividne ho trápi artritída, je mierne nahrbený.(Apparently he suffers from arthritis, he is slightly leaning.)

In this utterance the event described in the second sentence is not perceptually accessible but the proposition is apprehended by the speaker on the basis of perceptual traits present in the situation. The speaker "sees" the primary event through the secondary event. The situation described in the utterance *Trápi ho artritída* (He suffers from arthritis) cannot be perceived directly by the speaker, only inferred through some perceptual traits of his state (by leaning).

Direct contact is impossible for processes that are not realised in time t, i. e., processes realised in the past with perceptual "traces" present in the perceptual field of the speaker (6), or processes that are to happen in the future, and the speaker pro-

poses their realisation on the basis of certain perceptual signals present in his/her perceptual field (7):

- (6) Evidentne bol v ranných hodinách hore, pretože našla jeho tašku vybalenú.
   (He had been apparently awake in the early hours as she found his bag unpacked.)
- (7) Roztriasli sa mu ruky. Očividne o chvílu odpadne.
  (His hands have started to shiver. Obviously he is going to faint in a moment.)

The process of understanding the meaning of the given type of sentences is based on an inferential process which links the perception of conceptually related subevent (leaning) to state the existence of complex event (the existence of disease). It is an instance of active-zone/profile discrepancy (or zone activation) where the zone of the complex domain (perception of disease) is activated by its sub-domain (symptoms). The meaning of the unit *očividne* can be described as pre-metonymic and it can be captured by the formula "I see that... and therefore I infer that..." The term pre-metonymic was introduced by Dirven (2002, 108). It represents one stage in a conceptual continuum between literal and metaphorical language. In Dirven's work it is exemplified by phrases like *wash/fill a car* which in fact do not refer to the whole car, but to specific parts of it; from Langacker's (1990, 189-201) perspective the fuel tank would be called the active zone of the car. The similar meaning extension can be traced in examples (6) or (7). The units *evidentne* and *očividne* do not refer to a visual perception of the state of affairs represented by the propositions *he had been awake in* the early hours, he is going to faint in a moment. The speaker "sees" only some visual symptoms (she found his bag unpacked, his hands have started to shiver) which can be called the active zones of the given states of affairs. It means that in the pre-metonymic stage the evidential markers refer to the perception of the WHOLE DOMAIN (e.g. disease - apparently he suffers from arthritis) which stands for the perception of its ACTIVE ZONE PART (e. g. symptoms of disease – *he is slightly leaning*).

Even when the unit expresses perception-based inference, the cases of proceeding extensions can be traced: it occurs when the unit profiles perception based on diverse sources. This is illustrated by example (8):

(8) Zdrapil ju za prsia a stisol jej ich, očividne príliš surovo, lebo Luther konečne začul výkrik bolesti a žena nečakane dala mužovi zaucho.
(He grabbed her breasts and squeezed, apparently a little too hard, because, finally, Luther heard a yelp of pain and the woman abruptly slapped the man.)

This example can be understood as frame variation as various ways of perception functionally and physically coincide: the speaker gets the information from various sources including some visual symptoms. The usage of *očividne* to denote diverse perception can be called weakly metonymic as it refers both to visual and auditory source which is why the above examples are felt to be both literal and non-literal language. It can be captured by the formula "I see/hear... and therefore I infer that". It is

based on the fact that within the domain of perception visual perception functions as the most prominent and salient way of getting the information. The generalization process (see stands for perception from various sources) starts to build sufficient conceptual distance between the initial (seeing) and the new frame (knowing) on which further metaphor can be based.

## 3.3. Ambiguous examples

Even before these items have the extended meaning "know", they invite the inference of "knowing" in certain contexts. It might apply to a situation in which the speaker broods over a problem concerning the semantic closeness of two words, both visualising their phonetic similarity and mentally processing their semantic closeness:

(9) Odkazujem vás na slovo qadištu – **očividne** príbuzné so slovom kedeša. (I refer you to the word "qadistu", **obviously** cognate with "kedeshah".)

In such case, a stimulus is processed both visually and mentally. This is because if the speaker of (9) "sees (that the word is cognate)" (the central meaning), the speaker would also "know (that the words are semantically close)" (the inferred meaning). The context is ambiguous as to which of these two interpretations was intended by the speaker. The relationship between seeing and inference gives rise to the partial metonymy SEE FOR SEE AND KNOW. Partial metonymicity is given by the fact that on the one hand, the evidential marker can be interpreted to be referring to the perception, and on the other hand, it substitutes an entity within the same conceptual domain: the visual perception stands for knowing. This happens because of the fact that the event of seeing/perceiving precedes that of the implicated state of knowing and is also seen as bringing it about. The relationships between precedence and causation (perception) on the one hand and subsequence and result (assumption) on the other hand are metonymic.

As a result of inference extension, ambiguous contexts such as (10) are frequent. The source of information is not specified in the example (10) even in the extended context. The situation can be interpreted as either based on perception (the speaker sees Kalafke's facial expression) or assumption (the speaker knows Kalafke so that he infers that Kalafke had to overexert himself).

(10) Kalafke sa zjavne musel premáhať, aby Nadžíba takto oslovil.
 (Kalafke obviously had to overexert himself to address Nagib in such a way.)

Over time, the repeated use of see in contexts like (9) allows the inferential pattern to spread throughout the language community, resulting in a generalized invited inference. This generalized inference then eventually becomes lexicalized as a polysemous sense of adverbs.

## 3.4. Non-perception-based inference

In utterance (11), the inference is drawn on the basis of deduction (the speaker's assertion that the rescue operation was held by the IMF is based on the fact that it is

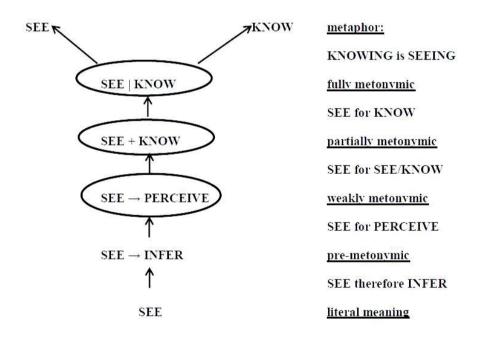
furnishing the greatest amount of money – the inference is based on reasoning rather than any observable facts).

(11) Záchrannú akciu však **očividne** vedie MMF. Fond poskytuje najväčší podiel finančného rámca vo výške 12,5 miliárd eur.

(The rescue operation was **obviously** held by the International Monetary Fund. Within the financial framework, the Fund is furnishing the greatest amount of EUR 12,5 billion.)

In such contexts the evidential adverbs like *očividne*, *zjavne*, *evidentne* refer to inferential processes in which externally observable evidence is lacking and the speaker bases his/her inference only on previous personal experience or general knowledge of the world. The usage of the unit *očividne* to express mental processing can only be explained on the basis of the fact that first, the idea of "I have seen" probably gave rise to the implicature "I have seen and (therefore) know" and the meton-ymy SEE FOR SEE AND KNOW, and then the implicature became pragmatically strengthened to "I know", i. e. the metonymy SEE FOR KNOW in which the "see" and "know" component is fully deconflated.

Figure 1 represents the continuum of the increasingly complex metonymic network underlying the metaphor KNOWING IS SEEING.



### 4. KNOWLEDGE AND BELIEF

We also have to consider the relation between epistemic modality and evidentiality. As previously stated, when the speaker uses the evidential, his/her intention is not only to inform of the information source but also of the certainty of his/her knowl-

edge, as there is the correlation between different degrees of certainty of knowledge and the type of information source coded by evidentials. The default epistemic value triggered by evidential adverbs of visual perception can be described as that of high certainty. In ambiguous contexts, the evidential meaning of the analysed units is backgrounded and the epistemic value of high certainty is highlighted.<sup>2</sup>

#### 5. CONCLUSIONS

These examples suggest that metaphor and inferencing may be working together to produce extensions from metonymy to metaphor, via a process of chaining (a concept adapted from Goosens 2003, 149). On the metaphor account, the "know" extension of the *očividne*-type reflects the well documented conceptual metaphor KNOW-ING IS SEEING (Sweetser 1990). On the metonymy account this metaphor arises in the chain of usages which can be captured as (gradually) metonymic being based on inferential processes. Panther and Thornburg (2003b) call metonymies "natural inference schemas" i. e. easily activable associations among concepts that can be used for inferential purposes. Conceptual relationships such as part-whole (perception of sub-event for perception of complex event, visual perception for diverse perception), cause-effect (perception for knowledge) facilitate the inferential work of conversational interactants in understanding the contextual meanings of evidential adverbs.

#### NOTES

- <sup>1</sup> Corpus version prim-8.0-public-all contains all publicly available SNC texts (71.06 % journalistic, 15.39 % fiction, 8.52 % professional and 5.03 % other texts), 1 477 447 216 tokens, 1 160 286 731 words.
- <sup>2</sup> The transposition of *očividne*-type units in their literal meaning to items with function of the evidential or epistemic operator is also supported by contexts in which the meaning component of visual perception bleaches, and on the other hand the items acquire also a function of intensifier – cf. its synonymic relation to units *výrazne*, *nápadne*: *Počas pár mesiacov podľa kamarátov zo skupiny očividne zostarol a schudol* (According to his friends from the band he has aged and lost weight during several months). In these contexts the given units function as qualitative adverbs modifying the predicate and they do not fall into the class of evidential units because they do not have the whole sentence in their scope, which is the precondition for delimiting the evidential markers. I would like to thank the anonymous reviewer for this suggestion.

#### LITERATURE

- Barcelona, Antonio. 2003. "The case for a metonymic basis of pragmatic inferencing: evidence from jokes and funny anecdotes." In *Metonymy and Pragmatic Inferencing*, ed. by Klaus-Uwe Panther Linda L. Thornburg, 80–102. Amsterdam Philadelphia: John Benjamins.
- Barnden, John A. 2010. "Metaphor and metonymy: Making their connections more slippery." *Cognitive Linguistics* 21, 1: 1–34.
- Brdar-Szabó, Rita Mario Brdar. 2011. "What do metonymic chains reveal about the nature of metonymy." In *Defining Metonymy in Cognitive Linguistics: Towards a Consensus View*, ed. by Antonio Barcelona – Francisco Jose Ruiz De Mendoza – Réka Benczes, 217–248. Amsterdam – Philadelphia: John Benjamins.

- Croft, William. 1993. "The role of domains in the interpretation of metaphors and metonymies." *Cognitive Linguistics* 4, 4: 335–370.
- Croft, William. 2003. "The role of domains in the interpretation of metaphors and metonymies." In *Metaphor and Metonymy in Comparison and Contrast*, ed. by René Dirven Ralf Pörings, 161–206. Berlin New York: Mouton de Gruyter.
- Crystal, David. 2008. Dictionary of Linguistics and Phonetics. Oxford: Willey-Blackwell.
- Dirven, René. 2002. "Metonymy and metaphor: Different mental strategies of conceptualisation." In *Metaphor and metonymy in comparison and contrast*, ed. by René Dirven Ralf Pörings, 75–112. Berlin: Mouton de Gruyter.
- Goosens, Louis. 1990. "Metaphtonymy: the interaction of metaphor and metonymy in expressions for linguistic action." *Cognitive Linguistics* 1, 3: 323–340.
- Goosens, Louis. 2003. "Patterns of Meaning Extension, 'Parallel Chaining', Subjectification, and Modal Shifts." In *Metaphor and Metonymy at the Crossroads. A Cognitive Perspective*, ed. by Antonio Barcelona, 149–169. Berlin New York: Mouton de Gruyter.
- Grady, Joseph. 1997. "THEORIES ARE BUILDINGS revisited." Cognitive linguistics 8, 4: 267–290.
- Handl, Sandra. 2011. "Underspecified Metonymic Meanings: A matter of processing or perception?" The Stockholm 2011 Metaphor Festival, Stockholm, September 8–10.
- Kövecses, Zoltán. 2013. "The Metaphor–Metonymy Relationship: Correlation Metaphors Are Based on Metonymy." *Metaphor and Symbol* 28, 2: 75–88.
- Lakoff, George Mark Johnson. 1980. Metaphors we live by. Chicago: University of Chicago Press.

Lakoff, George - Mark Johnson. 2003. Metaphors we live by. Chicago: University of Chicago Press.

- Langacker, Ronald W. 1990. Concept, Image, and Symbol. The Cognitive Basis of Grammar. Berlin New York: Mouton de Gruyter.
- Nuyts, Jan. 2001. Epistemic Modality, Language and Conceptualization. Amsterdam: John Benjamins.
- Nuyts, Jan. 2006. "Modality: Overview and linguistic issues." In *The expression of modality*, ed. by William Frawley, 1–26. Berlin: Mouton de Gruyter.
- Panther, Klaus-Uwe Linda Thornburg. 2002. "The roles of metaphor and metonymy in English -er nominals." In *Metaphor and Metonymy in Comparison and Contrast*, ed. by René Dirven – Ralf Pörings, 279–319. Berlin – New York: Mouton de Gruyter.
- Panther, Klaus-Uwe Linda Thornburg. 2003a. "Introduction: On the nature of conceptual metonymy." In *Metonymy and Pragmatic Inferencing*, ed. by Klaus-Uwe Panther – Linda Thornburg, 1–22. Amsterdam – Philadelphia: John Benjamins.
- Panther, Klaus-Uwe Linda Thornburg. 2003b. "Metonymies as natural inference and activation schemas: the case of dependent clause as independent speech acts." In *Metonymy and Pragmatic Inferencing*, ed. by Klaus-Uwe Panther – Linda Thornburg, 127–147. Amsterdam – Philadelphia: John Benjamins.
- Radden, Günther. 2000. "How metonymic are metaphors?" In *Metaphor and metonymy at the crossroads: A cognitive perspective*, ed. by Antonio Barcelona, 93–108. Berlin New York: Mouton de Gruyter.
- Radden, Günther. 2005. "The ubiquity of metonymy." In *Cognitive and Discourse Approaches to Metaphor and Metonymy. Publications de la Universitat Jaume I.*, ed. by José Louis Otal et al., 17–28. Castelló de la Plana: Publicacions de la Universitat Jaume.

Riemer, Nick. 2002. "When is a metonymy no longer a metonymy." In *Metaphor and metonymy in comparison and contrast*, ed. by René Dirven – Ralf Pörings, 379–406. Berlin – New York: Mouton de Gruyter.

- Ruiz de Mendoza Ibáñez, Francisco José Olga Isabel Díez Velasco. 2002. "Patterns of Conceptual Interactio." In *Metaphor and Metonymy in Comparison and Contrast*, ed by. René Dirven – Ralf Pörings, 489–532. Berlin – New York: Mouton de Gruyter.
- Slovak National Corpus. 2018. Available at: https://bonito.korpus.sk
- Sullivan, Karen. 2007. "Metaphoric Extension and Invited Inferencing in Semantic Change." *Culture, Language and Representation, Special Issue: Metaphor and Discourse* 5, 257–274.
- Sweetser, Eve. 1990. From Etymology to Pragmatics. Metaphorical and Cultural Aspects of Semantic Structure (Cambridge Studies in Linguistics 54). Cambridge: Cambridge University Press.

Taylor, John R. 1989. *Linguistic Categorization. Prototypes in Linguistic Theory*. Oxford: Clarendon Press. Taylor, John R. 2002. *Cognitive grammar*. Oxford: Oxford University Press.

Metonymy. Metaphor. Cognitive linguistic theory. Inference. Evidentiality. Epistemic modality.

The paper brings the analysis of evidential units such as *očividne, evidentne, zjavne* (obviously, apparently, evidently) which show semantic extensions from direct visual perception meaning to assumption meaning. This semantic extension can be viewed as an example of the KNOWING is SEEING metaphor which arises on the basis of metonymy. The paper brings the corpus data to show various usage of the given units which can be interpreted as metonymical (from pre-metonymic through weak metonymic to partially metonymic readings). It is shown how metonymy and inference processes cooperate to produce the metaphoric extension TO SEE is TO KNOW.

Doc. Mgr. Martina Ivanová, PhD. Department of Slovak and Media Studies The Faculty of Arts Prešov University Ul. 17. novembra 1 080 78 Prešov Slovak Republic ivanovmartina@gmail.com

Ľ. Štúr Institute of Linguistics of the Slovak Academy of Sciences Bratislava, Slovak Republic

Institute of Western and Southern Slavic Studies University of Warszaw, Poland