Milana Michalevic, Belarusian State Pedagogical University, Department of Modern European Languages

# Onomasiological Description of Bahuvrihi Compounds and Semantics of the First Constituent

#### **Summary**

Syntactic and lexical-oriented approaches to the nature of nominal compounds overlap to a great extent, as indicated, among other factors, by the way in which compound semantics is discussed. Most research dealing with the semantics of compound nouns concerns the relationship between the elements and the intricate paths of the lexicalization process. This paper takes a slightly different angle. Taking an onomasiological approach as simply the starting point in selecting linguistic material embraced by this research (compounds whose onomasiological structure comprises QUALITY + SUBSTANCE (in Dokulil's terms (Dokulil 1962)), more commonly known as bahuvrihi compounds), this paper goes on to suggest a view inside the semantic change occurring in the QUALITY element of the compound and the way in which this influences the semantics of the whole. The semantic shift taking place in the first constituent (normally represented by an adjective stem of the adjective of quality) is often typical of the process of personal nomination, especially in cases when joining two perfectly neutral words in the process of compounding alters the connotative characteristics (partly demonstrating the discrepancy between the parameter expressed by the compound and the parameter accepted as standard in a certain culture). In this era of politically correct expression, the subtleties governing this area of nomination are worthy of attention, not only for scholars but also for teachers of English as a foreign language.

#### Introduction

Combining two or more lexical stems to create a new unit of vocabulary, which is the common description of the process of compounding (Crystal 2006: 129), is by far the most productive way of enriching the English lexicon, or as we should probably say for the benefit of those viewing compounds as a particular construction type, the system of English nominations. The elements of classification introduced by Sanskrit grammarians are still widely used by linguists and relied upon in contrastive and characterological typological research (Bauer 1983, 2006; Arnold 1986). However, every single aspect of compounding seems to have been at least touched upon, if not comprehensively discussed, in the many theories of word-formation that have appeared since that time, beginning with Marchand's groundbreaking work, *The Categories* and Types of English Word-formation, which first saw light in 1969. Aspects that have attracted scholars' attention have included the structural and morphological characteristics of compounds. semantic and lexico-grammatical classifications (parsing the compounds and their elements, i.e. identifying them as certain parts of speech or structural elements), the relationship between compounds and free combinations/syntactic constructions/idioms, the supremely productive neoclassical compounding, and what may be called ad-hoc compounding, projecting the development of compounding in different languages, and so forth (Akhmanova 1954:54; Booij 1995; Chomsky and Halle 1968; Chomsky 1970:124-221; Giegerich 2004; Lees 1970: 174-186; Lipka 1994: 2164-2167; Meshkov 1985; Gudilova 2005; et al.). Research focusing on compounding in English combines a variety of approaches striving either 1) to create a list of reliable criteria to pin down the instances of lexicalization and identify compounds distinguishing them from other noun-plus-noun constructions (lexical-oriented approach), or 2) to penetrate the essence of compounding by creating a set of rules (grounded in formal grammar or generative theory) which it is supposed to follow (syntactic approach), or 3) even to show that strict borderlines are not to be applied to English composites at all, as English noun-plus-noun

constructions originate both in the lexicon and the syntax (the modular overlap approach suggested by H.J. Giegerich (Giegerich 2005).

With the emphasis shifting in recent years from a structural to a cognitive approach, compounding is increasingly viewed from an onomasiological perspective, as in the works on word-formation by Pavol Štekauer, Joachim Grzega (Štekauer 1999, 2005, 2006; Grzega 2002) and other linguists. Here, we may agree with Dr Elena Kubryakova who claims that:

The processes of word-formation have, for a long time, been described exclusively in their technical detail; the numerous formal and semantic characteristics of individual word-formation models have become well-established. This now allows us to proceed to an adequate interpretation of the available data and to move one step further on the way towards comprehending the cognitive foundations of word-formation (Kubryakova 2004:351)

Speaking of lexicalized forms, rather than construction types, the onomasiological approach would appear to offer a perfect opportunity to gain insights into the workings of the human mind when creating new names, bypassing the aforementioned technical details. However, this is not the only benefit to be gained by adopting an onomasiological perspective in the analysis of compounding. Semantic de-condensation with reference to the onomasiological structure of the word has proved to be an effective strategy in the teaching of foreign languages, as Irena Kostadinova shows in her article on communicative strategies in teaching Russian (Kostadinova 2002). Moreover, it seems that relying on onomasiological categories for the classification of compounds provides a clear and transparent scheme for contrastive studies of English and Slavic vocabularies. Since the differences in conceptual categorization of the world by speakers of different languages are easier to locate and translate into the meta-language of linguistic research as compared with registering far too many differences between grammatical characteristics, the onomasiological approach also enables us to avoid some of the difficulties arising from the envisaged lexico-grammatical categorical discrepancies when comparing a synthetic language (e.g. Russian) with an analytical one (English).

# Bahuvrihi compounds: onomasiological description

Referring to the naming process, the creation of a new word can be seen to underpin the concept to be denoted in relation to one of the basic categories of human experience – a certain onomasiological category, 'a basic conceptual structure in relation to its expression in a particular language' (Štekauer 2006). The five levels through which a speaker's mind passes during the process of nomination have been comprehensively discussed in works by J. Grzega (2002) and P. Štekauer (1999: 81-94), and are quoted in Fig. 1 for reference. However, we would like to concentrate on the onomasiological level, at which stage the most relevant and salient aspects of the concept to be named are selected as the onomasiological mark and the onomasiological basis of the new word.

# A speaker's mind passes through five levels in the namegiving, or word-finding, process:

- (1) the *conceptual* level (analysis of the concept)
- (2) the *semantic* level (structuring of the semantic markers)
- (3) the *onomasiological* level ("naming in an abstract sense", i.e. selecting the iconyms)
- (4) the *onomatological* level ("naming in a concrete sense", i.e. selecting the morphemes)

# (5) the *morphonological* level (concrete realization respecting a word's inherent morphonological rules)

Fig. 1 (Grzega 2002: 3-4)

Bahuvrihi compounds are perhaps one of the rare cases when the onomasiological understanding of the term is perfectly illustrated both by the definition and by the term itself: the word *bahuvrihi* (Sanskrit for 'having much rice') is an example of bahuvrihi as such.

From an onomasiological point of view, bahuvrihi compounds are to be defined as complex formations with no onomasiological basis, just an onomasiological mark having the structure QUALITY + SUBSTANCE. Some authors extend the definition of bahuvrihi compounds, suggesting that all exocentric compounds be included into this type (e.g. the famous example of *pickpocket*). Keeping to the onomasiological approach, we prefer to narrow it down to the exocentric composite forms which conform to the original description of the type first provided by the Sanskrit grammarians and which are termed by J. Grzega as "...'Incomplete Complex Structure B (ICSB)', where B stands for *base* and where the base is not represented in the form" (Grzega 2002:9). Since compounding as a means of lexicalization is primarily the method used to create nouns, in this paper we have focused on a discussion of countable nominal bahuvrihi in which the QUALITY mark refers to perceptual attributes of the concept to be named.

## Semantic change in bahuvrihi compounds

When concentrating on the lexicalized forms, bahuvrihi compounds present the perfect example of demonstrating the contiguity of the two sides of semantics – onomasiology and semasiology – and their interrelation resulting in the creation of new forms and new meanings.

We might say that bahuvrihi, perhaps unlike any other composite type, could be called the encyclopaedia of semantic change, serving to illustrate every conceivable aspect of the latter, be it nature, results, or factors (causes) of the compounding process (in terms of S. Ullmann's threefold scheme (Ullmann 1962, 1967), summarized and presented in Fig.2) which seems, if not entirely perfect, then quite satisfactory for the purpose of our analysis:

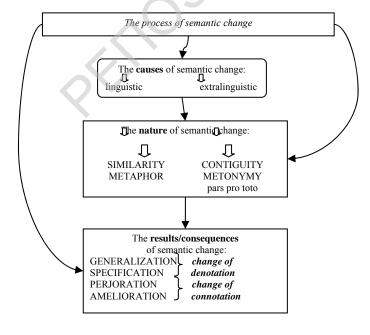


Fig.2

#### The nature of semantic change: Metonymy and metaphor in bahuvrihi

We deliberately omit ellipsis (change based on contiguity of names) and folk etymology (change based on similarity of names), also described by Stephen Ullmann, from the scheme reproduced here. For one thing, unlike metaphor and metonymy, they deal with the formal structures – forms, not concepts – and, therefore, they should go under the heading of linguistic factors behind the semantic change.

The nature of semantic change interwoven in the naming process seems rather obvious. Metonymical in nature, the bahuvrihi are sometimes outlined as 'possessive' compounds (Bauer 2006:723), which again demands a reference to the origin of the term: bahuvrihi 'having much rice'. This is of course the most striking aspect – how the human mind is forced to refer a *flatfoot*, a *bigmouth* or *bluestocking* to a person, rather than to their skin, mouth, or even to their stockings. However, what seems even more interesting, in our opinion, is the search for an answer as to why we use these names to refer to people who do not necessarily have flat feet, whose mouths are not large in a strictly physical sense, and who do not wear blue stockings. And although metonymy certainly dominates the landscape when discussing the onomasiological structure of bahuvrihi compounds (since it appears very early on, in the process of naming when selecting a no-base onomasiological structure, choosing the part and its characteristic (= onomasiological mark) to represent the whole), we would like to take the discussion a step further and analyze other aspects of semantic change occurring in the compound and/or its constituents.

To conclude the issue of metonymy, we should mention that some authors have suggested the possibility of identifying two consecutive metonymical steps in certain examples of bahuvrihi (Geeraerts 2002: 17). Dirk Geeraerts notes two consecutive metonymical extensions in his example from the Dutch word hanglip (literally 'a hanging lip' = 'an unhappy person'), arguing that the second one – leading the word to denote 'an unhappy, sulky, pouting person' – involves the metonymical relationship between a typical effect and the usual cause of this effect (Geeraerts 2002:17). I have no right to discard Geeraert's example, as I do not speak the language from which he drew his example, but on the basis of his description, I would rather qualify it as a case of metaphorically induced change based on the physical similarity of a person in the pouts and, for instance, a pouting child. However, the author is right to suggest the possibility of double metonymy in bahuvrihi. Let us turn to some examples.

- (1) southpaw 'a boxer who leads with his right hand and off his right foot as opposed to the orthodox style of leading with the left' or 'any left-handed person'. The lexeme was originally a term applied to a left-handed baseball player, perhaps so called because baseball pitchers traditionally face west, so that a left-handed pitcher would throw with the hand on the south side of his body. It seems to us that south and right can be described here as having a relation of contiguity, which suggests the metonymical nature of the first element. The second metonymical change involved occurs in the naming process, when the somatic name comes to denote a person. The third shift (metaphorical and functional) should perhaps also be mentioned here, which comes between the metonymical changes and concerns the second constituent; after all, humans do not have paws, and paw is used in the sense of hand.
- (2) *leatherneck* (slang) 'a member of the US Marine Corps', so called from the custom of facing the neckband of their uniform with leather. Use of *leather* in an attributive sense is triggered by contiguity (metonymical shift 1), and *neck*, combined with this attribute, is subsequently used to denote a person (metonymical shift 2, occurring simultaneously with the naming process).
- (3) blisterfoot '(AmE slang) 'a person who walks a lot'. This example would fit into the scheme described by D. Geeraerts, i.e. the metonymical reaction between the effect (blisters on feet) and the cause of this effect (walking to exhaustion) (metonymical shift 1) is

complemented by the metonymy incorporated in the naming process (metonymical shift 2) which is usual for bahuvrihi compounds.

None of the three examples is ideal, since the QUALITY element in them is represented by a relational attribute, and it may be argued that their onomasiological structure could be equally well defined as SUBSTANCE + SUBSTANCE. Therefore, they cannot be listed to represent bahuvrihi in the strictly onomasiological sense of the term. However, if we choose to accept that the first element is constituted by a relational adjective, they may well serve as examples of double metonymy whose first step is rooted in the semantics of the first constituent.

Rather more typical of real bahuvrihi (whose onomasiological structure is QUALITY + SUBSTANCE) is a combination of **metaphor and metonymy** in creating a new meaning, where the metaphorical shift is especially common in the first constituent as well.

- (1) big gun (informal) an important or influential person;
- (2) *dimwit* a stupid or silly person (from Old English *dimm*; related to Old Norse *dimmr* 'gloomy, dark');
- (3) hothead an excitable or fiery person;
- (4) bigwig (informal) an important person;
- (5) the cold shoulder a show of indifference; a slight [ellipsis from a cold shoulder of mutton used to be served to an unwelcome guest];
- (6) bighead (informal) a conceited person;
- (7) dirty mouth a person using abusive language;
- (8) deep pocket a wealthy person; wealth; financial source;
- (9) greenhorn an inexperienced person, esp. one who is extremely gullible;
- (10) softhead a simpleton, a foolish or ignorant person;
- (11) lowbrow (disparaging) a person who has uncultivated or non-intellectual tastes;
- (12) thickhead (1) a stupid or ignorant person; fool.

The examples (6), (7), (8), (9) differ from the rest in that it is difficult to clearly state whether the metaphorical shift occurs before or after the metonymical lexicalization, since the expressions are strongly idiomatic. In the remainder of the examples, it is most likely to occur either before or at the same time as the metonymical shift. The first constituent QUALITY (represented by stems of adjectives denoting various perceivable qualities), when combined with the second constituent SUBSTANCE, already carries the metaphorical meaning. Big comes to denote not physically big, but 'important, influential' or 'self-important, conceited'. Hot does not refer to temperature, but to the temper of the person described by the composite form. Cold, originally stating the physical temperature of the dish (shoulder of mutton), comes to denote the intensity of feelings (or rather the absence of those) towards the unwanted guest, as the composite form extends its meaning to cover all the emotional aspects of reception, and not just the food served there. Green refers not to the colour, but to the age (green 'young'). Dirty denotes a quality that is closer to that inherent in the expressions dirty words or dirty language than in dirty clothes. Low has nothing to do with height or even with the actual size of one's forehead, but implies a negative comment on a person's intellectual or cultural characteristics.

Curiously, when we turn to similar examples containing the same stems, but denoting things, plants or animals, not only do they not demonstrate any inclination for a metaphorical shift of meaning, but also, unlike the names of persons, tend to preserve their neutral status, as far as their style designation is concerned, while also remaining free from the connotational changes typical of the names of persons:

#### Cf.:

- (1) bigeye 'any tropical or subtropical red marine percoid fish of the family *Priacanthidae*, having very large eyes and rough scales';
- (2) bighorn 'a large wild sheep, Ovis canadensis, inhabiting mountainous regions in North America and NE Asia: family Bovidae, order Artiodactyla'. The male has massive curved horns, and the species is well adapted for climbing and leaping;
- (3) big bud 'a serious disease of plants, esp. of blackcurrants, in which the buds swell up as a result of attack by the gall mite *Cecidophyopsis*';
- (4) *green belt* 'a zone of farmland, parks, and open country surrounding a town or city: usually officially designated as such and preserved from urban development';
- (5) *soft-shell* the name used for several marine clams of the genus *Mya*, esp. *M. arenaria*, an edible species of coastal regions of the US and Europe, having a thin brittle shell;
- (6) softtail 'a forest bird (Thripophaga)';
- (7) soft-shoe a noun relating to a type of tap dancing performed wearing soft-soled shoes;
- (8) *thickhead* (2) 'any of various Australian and SE Asian songbirds of the family *Muscicapidae* (flycatchers, etc.)'.

None of the examples listed above carries a dictionary indication designating them as derogatory, disparaging or otherwise emotionally charged in a negative way, but none registers a metaphorical shift in the first component, either. In fact, if we look for metaphorical bahuvrihi compounds outside the system of personal nomination (and we would need to look really hard), we would be able to find positively charged names of things, such as *big ticket* 'an expensive or precious item'.

### Consequences of semantic change: gradation and shift in connotation

We prefer to omit a discussion of the changes in denotation that inevitably take place in any naming process, including compounding, and which have therefore been given due attention in many works. Connotational changes (pejoration, or degeneration, and amelioration, or elevation) seem to be unfairly neglected, though the pejorative tinge acquired by bahuvrihis created by combining two neutral forms has been noted. For example, Irina Arnold remarks: "Semantically the bahuvrihi are almost invariably characterized by a deprecative ironical emotional tone, c.f. bigwig 'a person of importance', blackshirt 'an Italian fascist' (also, by analogy, any fascist), fathead 'a dull, stupid person' [...] lazy-bones 'a lazy person'" (Arnold 1986: 125). As we could have seen from the examples listed above, this cannot be referred to all bahuvrihi compounds, though it certainly can be described as a strong tendency in the semantics of those which denote persons. The names of plants, animals and things in general are not free from consequences of semantic change altogether. But deprecative (or, much more seldom, complimentary) meaning of the qualitative attribute seem to arise or surface, ironically, only as we combine the OUALITY constituent and the SUBSTANCE constituent to create a name of a person. The same lexical stems used to create the metonymic names of animals / plants / diseases remain neutral and so does the whole form:

#### Cf

- (1) blackleg (a) 'a person who acts against the interests of a trade union, by continuing to work during a strike or taking over a striker's job'; a person who cheats in gambling, esp. at cards or in racing;
  - (b) 'a fungal disease of cabbages and related plants caused by *Phoma lingam*, characterized by blackening and decay of the lower stems').
- (2) (a) *green apron* 'a pious and sanctimonious person, marked by false reverence'; (b) *green bean* 'any bean plant, such as the French bean, having narrow green edible pods when unripe';

- (c) *green-wellie* noun modifier characterizing or belonging to the upper-class set devoted to hunting, shooting, and fishing.
- (3) (a) blackarm 'a disease of cotton plant caused by Xanthomonas malvacearum';
  - (b) blackback 'a type of fish, Pseudopleuronectes americanus;
  - (c) *loudmouth* (informal) '1) a person who brags or talks too loudly 2) a person who is gossipy or tactless'.

While names of plants, animals, objects and diseases are stylistically neutral, names of persons convey a certain attitude of the speaker towards the person addressed by this nomination. Example (2) (c) is especially interesting because it demonstrates that the change of connotation, albeit just social connotation (associations with certain social strata) is not bound to be exclusively negative, though negative connotations are far more typical of the English bahuvrihi compounds than of their Russian or Belarusian counterparts, for example. Even this small selection of examples allows us to see that the adjective stems denoting quality are quite rarely used in their literal sense in compounds denoting persons, but preserve their original meaning when they come to denote animals, plants and other things. This can be supported by the quantitative data listed by O. Vasylyeva (Vasylyeva 2006): of all the bahuvrihi compounds denoting persons, 18 per cent served to characterize a person as a biological being, 49 per cent – as a psychical being, and 33 per cent – as a social being. Compounding has focused on the following spheres of human life: intellect (21 per cent of all bahuvrihi names of persons), occupation / activity (15 per cent), character traits (11 per cent), habits (10 per cent), and appearance (only 10 per cent). All of the spheres and aspects of human existence in which it is impossible to do without valuation, and the axiological orientation of the compounding process resulting in the emotional and stylistic markedness of bahuvrihi denoting persons, is additional proof of this tendency.

The mechanisms for bringing about semantic change vary slightly, subject to the primary meaning of the first element. For convenience, three major mechanisms of change could be distinguished, based on the types of QUALITY element (which in many cases overlap): *emotional* (evaluating), *perceptual* and *parametric*.

(1) Emotional QUALITY (the first element is constituted by the stem of an evaluating or "opinion" adjective).

Quite predictably, the connotative meaning of the composite is affected by the connotation of the first element. The connotational change in the meaning of the entire form occurs here as a result of combining an emotionally charged first constituent of QUALITY (*dirty, bad, goody*) with an emotionally neutral second constituent of SUBSTANCE (*dirtymouth, badmouth, goody two-shoes*). As a result, the connotation of the whole form is affected.

(2) Perceptual QUALITY (adjective stems denote quality that can be perceived by the senses (colour, taste, sound, etc.).

The transformation of connotation occurs as a result of shifting to the periphery, and then altogether losing the semes referring to the way in which this characteristic affects our senses. The emotional semes are activated instead by way of metaphorical or metonymical shift, and a perceptual adjective turns into an evaluating adjective as a result. This process, described by L. V. Layenko (Layenko 2004) with reference to perceptual adjectives in general, appears to occur extremely often when bahuvrihi compounding is used to create the name of a person. This is not typical of names of plants or animals, though some perceptual adjective stems can slightly shift their meaning as a result of metonymical change.

#### (3) Parametric (measurable) QUALITY.

The special feature of parametric adjectives is their *gradability*. Neutral adjectives represent height, weight, width, size, and so on, as quantitative characteristics positioned at a certain spot on the parametric scale (see Fig. 3)

Size: a small car

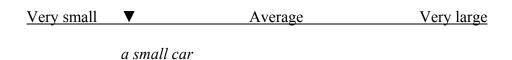


Fig. 3

Accordingly, although the exact meaning of the words big or tall would have different physical values, depending on whether we are discussing sequoias or fennel planted in the vegetable garden, big would normally mean 'bigger than average', and tall would mean 'taller than average'. This serves as a neutral definition of some characteristics, mostly physical, and although the actual denotation of the compound may vary, the gradation occurs within quite a small range and takes the average concept as a starting point, as in the example from Harry Potter (description of Hermione's cat, Crookshanks – see Fig.3a) below.

Ron buckled up as something huge and orange came soaring from the top of the highest cage, landed on his head and then propelled itself, spitting madly, at Scabbers. [...]Ron stuffed the trembling rat back into his pocket and straitened up, massaging his head. 'What was that?'— 'It was either a very big cat or quite a small tiger,' said Harry. (J. K. Rowling. Harry Potter and the Prisoner of Azkaban.)

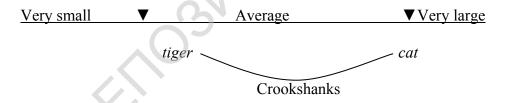


Fig. 3a

If such words are combined with another stem to create a neutral compound, the position of the quantitative gauge would be not very far from average, but still exceeding or preceding it, as indicated in Fig. 4 below. The result is a change in denotation, not in connotation (the meaning of the first component is specified):

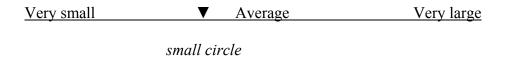
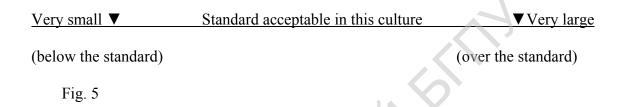


Fig. 4

However, if a parametric constituent is combined with another constituent in the structure of an emotionally charged compound, the discrepancy between the physical value of the parameter in question (its position on the scale) and the standard accepted in the speaker's culture is emphasized: *bigmouth* – one who boasts or talks too much; *tightwad* – a stingy person; *miser*.

When such an attribute is combined with the defined object in the onomasiological structure of a composite with additional evaluation meaning, the deviation from the standard accepted in a given culture becomes salient and translates into positive or negative connotation. The position of the attribute on the parameter scale moves even further away from the centre position: the Russian 'κορομκομομκα' ['korotkonozhka', short-leg] – a woman whose legs are too short to qualify for the beauty stakes; bigmouth – one who boasts or talks too much, etc. Therefore, what triggers the change of connotation in such nouns is the idea of positive standards of appearance or behaviour that is characteristic for a specific culture, which replaces the notion of "average" on the parameter scale, as shown in Fig. 5.



Associative metaphorical links based on the memorable positive or negative qualities of a person lead to generalization. The names *bluestocking* and *black-shirt* are metonymically motivated by the characteristics of typical items of clothing for a specific group of persons with specific personal characteristics. Later, the name spreads to include a wider group of persons. It is interesting that the names *blue collar*, *white collar* and *bluecoat* did not develop a similar emotional/judgemental meaning, although we may speak of a change in connotation (but only social connotation) in their case as well.

Therefore, emotional QUALITY elements (evaluative by their nature) entail an immediate change in connotation of the whole compound. Perceptual QUALITY elements undergo a change in connotation themselves, and then impose it on the whole composite word. Parametric QUALITY elements are subject to gradation as they are selected to modify a particular feature of the person to be named. In certain cases all three mechanisms are in action, as it is difficult to draw a strict borderline between the three types of the first constituent.

#### Conclusion

Taking into account the tendency of 'naïve geometry' reflected in language towards the spatial conceptualizing of non-material objects, we may suppose that the same process also takes place in cases where the first constituent of a bahuvrihi compound represents a metaphorical characteristic of the second constituent. It is interesting that a negatively viewed deviation from the norm sometimes outweighs the initial axiological characteristics of the constituent o of QUALITY (e.g. the adjective *big* in English, when presented in isolation, has a positive connotation).

Thus, when describing the onomasiological structure of composites in the English language, we should embrace all the levels of the onomasiological analysis, including the one where the

semantic markers are chosen. Therefore, we cannot discount the role of semantic change in the first constituent. The definition of the naming process as the itemization of reality in the language presupposes a consideration of both the intra-linguistic and extra-linguistic factors and definition of their roles in the persistence of certain onomasiological structures and their prevailing meanings.

#### References

- ABBYY Lingvo 12 Multilingual 2006. Electronic dictionary. Version 12.0.0.356. Article 5061. Akhmanova, O.S. 1954. K voprosu ob otlichiyi slozhnykh slov ot frazyeologicheskikh yedinits (On the issue of differentiating compound words from phraseological units). Works/Proceedings of the Linguistics Institute of the USSR Academy of Sciences, 1954. Vol. 4.
- Arnold, I. V. 1986. The English Word. Moscow: Vysshaya Shkola.
- Bauer, L. 1983. English Word-Formation. Cambridge, UK: Cambridge University Press.
- Bauer, L. 2006. *Compound*. In K. Brown (editor-in chief), *The Encyclopedia of Language and Linguistics* (2nd edition), Vol. 2, Oxford: Elsevier, 719-726.
- Booij, G. 1995 Inherent versus Contextual Inflection and the Split Morphology Hypothesis. In Booij, G. and Marle, J. van (eds.), *Yearbook of Morphology*. Dordrecht: Kluwer, 1-16.
- Chomsky, N. 1970. Remarks on nominalizations. In R. A. Jacobs and P. S. Rosenbaum (eds.), Readings in English Transformational Grammar. Waltham MA: Ginn & Co. 184-221.
- Chomsky, N. and Halle, M. 1968. The Sound Pattern of English. New York: Harper and Row.
- Crystal, D. 2006. *The Cambridge Encyclopedia of the English language*. Cambridge: Cambridge University Press.
- Dokulil, M. 1962. Tvoření slov v češtině. Teorie odvozování slov. Praha: Nakladatelství ČSAV. Geeraerts, Dirk. 2002. The interaction of metaphor and metonymy in composite expressions. In R. Dirven and R. Pörings (eds.), *Metaphor and metonymy in comparison and contrast*. Berlin: Mouton de Gruyter. 435-465. Internet:
  - http://wwwling.arts.kuleuven.ac.be/qlvl/PDFPublications/02Theinteraction.pdf Accessed: May 2, 2008.
- Grzega, J. Some Thoughts On A Cognitive Onomasiological Approach To Word –Formation With Special Reference To English. *Onomasiology Online 3 (2002)*. Internet: <a href="http://www1.ku-eichstaett.de/SLF/EngluVglSW/grzega1023.pdf">http://www1.ku-eichstaett.de/SLF/EngluVglSW/grzega1023.pdf</a> Accessed: February 10, 2008.
- Giegerich, H. J. 2005. Lexicalism and modular overlap in English. / SKASE Journal of Theoretical Linguistics Vol. 2. 2005, No.2. 43-62. Internet: <a href="http://www.skase.sk/Volumes/JTL03/06.pdf">http://www.skase.sk/Volumes/JTL03/06.pdf</a> Accessed: March 08, 2008.
- Gudilova, S.V. 2005. Produktivnyje tipy obrazovaniya slozhnykh slov v sovremennom russkom yazykie (Productive methods of creating compounds in modern Russian). Moscow: MGU.
- Kostadinova, I. 2002. Kommunikativnyje aspekty slovoobrazovatelnoy nominacii i prepodavaniye russkogo yazyka kak inostrannogo (Communicative aspects of wordformation nomination and teaching Russian as a foreign language). In D. Mitev and A.Nikolova (eds.), *Problemy kognitivnogo i funkcionalnogo opisaniya russkogo i bolgarskogo yazykov*. Shumen: Universitetsko izdatelstvo Episkop Konstantin Preslavski. Internet: <a href="www.russian.slavica.org/article146.html">www.russian.slavica.org/article146.html</a> Accessed: March 14, 2007.
- Kubriakova, E. S. 2004. *Yazyk i znanije: Na puti polucheniya znaniy o yazykie: chasti rechi s kognitivnoj tochki zreniya. Rol yazyka v poznaniji mira* (Language and knowledge: The journey of gaining knowledge about a language: parts of speech from a cognitive viewpoint. The role of language in the perception of the world). Moscow: Languages of the Slavic culture.

- Layenko, L. V. 2004. Perceptivniy priznak kak obyekt nominaciyi (The perceptual quality as the object of nomination). Vestnik VGU. Seriya: Filologiya. Zhurnalistika. 2004, No. 2. 71-77.
- Lees, R.B. 1970. Problems in the grammatical analysis of English nominal compounds. In M. Bierwisch and K. E. Heidolph (eds.), *Progress in linguistics*. The Hague: Mouton. 174-186.
- Lipka, L. 1994. Lexicalization and institutionalization. In: R. E. Asher (ed.), *Encyclopedia of language and linguistics*, Oxford: Pergamon Press, Vol. 4, 2164-2167.
- Marchand, H. 1969. The categories and types of present-day English word-formation. München: Beck.
- Meshkov, O. D. 1985 *Slovoslozheniye v sovremennom anglijskom yazyke* (Compounding in modern English). Moscow: Vysshaya Shkola.
- Štekauer, P. 1999. Fundamental Principles of an Onomasiological Theory of Word-Formation in English. *Sborník praci filozofické fakulty Brnénské Univerzity Studia minora fakultatis Philosophiae Universitatis Brunensis*. S. 5, 1999 Brno Studies in English 25. 75-97.
- Štekauer, P. 2005 Onomasiological approach to word-formation. In P. Štekauer and R. Lieber (eds.), *Handbook of Word-formation*. Dordrecht: Springer: 207-229.
- Štekauer, P. 2006. Onomasiological theory of word-formation. In K. Brown (editor-in chief), *The Encyclopedia of Language and Linguistics* (2nd edition), Vol. 9, Oxford: Elsevier. 34-37.
- Ullmann, S. 1962. Semantics: An Introduction to the Science of Meaning. Oxford: Blackwell.
- Ullmann, S. 1967. The Principles of Semantics. 2nd edition. Oxford: Blackwell.
- Vasylyeva, O.H. 2006 Conceptual Semantics of Anthroposemic Substantival Bahuvrihi Compounds in Modern English. Kyiv: Kyiv National Linguistic University. Internet: <a href="http://www.lib.ua-ru.net/inode/4111.html">http://www.lib.ua-ru.net/inode/4111.html</a> Accessed: March 15, 2008.