

# METAPHORIZATION AND METONIMIZATION AS TOOLS OF SEMANTIC DERIVATION (BASED ON ENGLISH ECONOMICS TEXTBOOKS)<sup>1</sup>

Svetlana P. Anokhina

Togliatti State University

**Abstract.** This paper studies two types of indirect (secondary) nomination: simulative and indicative, taken extracts from English economics textbooks. The simulative nomination is actualized through functional transfer, which is interpreted as a separate kind of metaphor termed “actional metaphor”. The analysis of indicative nomination is focused on metonymy and synecdoche (as a closely related device), which is conditioned by the same transfer principle on the basis of an essential attribute. The semantic derivatives are considered in sentences representing such a logical form of thought as definition, which reveals the metaphoric and metonymic processes in the field of English economic terminology.

Our analysis reveals the interrelations between models of terms and their functions as designators of target and source domains on the one hand, and types of cognitive metaphor (ontological and conceptual), on the other. The author comes to the conclusion that both types can have either simple or complex structures. Similarly, there are simple and complex metonymies. These are the peculiarities of this type of economic discourse from the point of view of semantic derivation. Another feature of economic discourse is the tendency towards the uniform secondary semiotic code when describing metaphorized terms.

With regard to indicative secondary nomination, the main findings are as follows: the metonymic lexis is organized as a chain of oppositions: terms and nomens – terms – terms and common lexis – common lexis. The mechanism of forming “mixed” kinds of indirect nominations, i.e. metaphonymy and synecdoche-metonymy, is revealed in the course of the contextual analysis. This leads the author to a hypothetical argument that it is the actional metaphor that underlies these mixed types of semantic derivatives.

Both types of the secondary nomination have a systemic nature: metaphor is described in other system units; metonymies have a field structure and are actualised through specific oppositions.

---

<sup>1</sup> Anokhina S.P. 2021. Metaphorization and Metonimization as Tools of Semantic Derivation (Based on English Economics Textbooks). *Professional Discourse & Communication*. 3(3). P. 65–82. DOI: <https://doi.org/10.24833/2687-0126-2021-3-3-65-82>

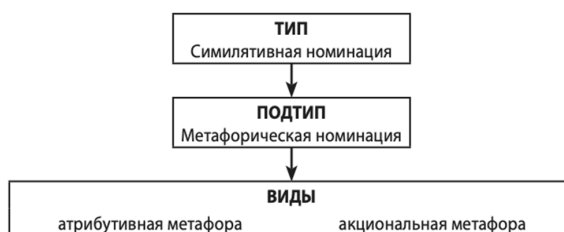
**Keywords:** similitive nomination, indicative nomination, actional metaphor, metonymy, synecdoche, term, nomen

The purpose of this article is to describe such types of figurative nomination as metaphor based on functional transfer, metonymy and synecdoche (as a device related to metonymy). In modern linguistic theory, priority is given to the dynamic approach to metaphor and metonymy, that is, to the study of the processes of metaphorization and metonymic transformations from the cognitive perspective (Gvishiani 2018; Lakoff, Johnson 2004; Aleksejeva, Mishlanova 2016; Krasavskij 2020; Borodulina, Makejeva 2018; Zadornova, Matvejeva 2017; Marinchenko 2018; Charteris-Black 2011; Schulzek 2014; Barcelona 2003; Jakobson 2002; Shutova, Kiela, Mailard 2016, and many others).

This article is far less ambitious in its scope: we offer a structural and semantic analysis of the means of secondary nomination functioning in English-language economics textbooks. The object of the research was chosen in light of the following considerations:

1. In most works, functional transfer is only mentioned as a type of metaphor, and is not considered an object of separate analysis. This point of view is quite natural, since in this case the transfer of a name from one object to another occurs on the basis of similarity or likeness, which is part of the ancient definitions of metaphor (Aristotle 1983: 645–681). At the same time, however, clarification of the type of similarity as either external (in shape, colour, way of moving, etc.) or internal – that is, the functional clarification of the metaphor – remains outside the framework of functional transfer<sup>2</sup>, based on an essential feature.

In other words, with metaphor proper, the similarity of objects is inferred primarily from the results of their sensory perception. Sensory perception plays an auxiliary role in functional transfer, giving way to ratio. In light of the above, it would seem that these types of secondary nomination can be interpreted within the framework of one of the subtypes of similitive nomination<sup>3</sup> as an attributive metaphor and an actional metaphor, respectively, and that the relationship between the two can be presented as follows:



<sup>2</sup> Reformatskij A. A. 1996. *Vvedenie v yazykovedenie [Introduction to Language Science]*. Aspekt Press.

<sup>3</sup> Shchyukina G. O. 2014. *Vidy frazeologiceskoj nominacii v anglijskom yazyke [Phraseology Nomination Types in English]*. Doctoral dissertation. Samara, Russia. P. 13.

<b>ТИП</b> Симильная номинация	<b>TYPE</b> Similative nomination
<b>ПОДТИП</b> Метафорическая номинация	<b>SUBTYPE</b> Metaphorical nomination
<b>ВИД</b> атрибутивная метафора акциональная метафора	<b>CLASSES</b> attributive metaphor actional metaphor

2. Metonymy, as one of the classes of indicative secondary nomination based on a “semantic shift,” is close to functional transfer in that, here, “a communicatively relevant feature” that is, an essential feature, “is selected from a set of features that make up a concept”<sup>4</sup>. With synecdoche, as we know, we are not talking “about a ‘whole’, but rather about an essential part, described by an important sign of its detachment – by function” (Kolesov 2012: 254). Thus, the objects of this study are described in terms of secondary nomination by the unity of an essential feature on the basis of which the name is transferred from one object to another.

That said, this reasoning does not eliminate the differences that exist between metaphor and metonymy, which are described in detail in a number of works (see, for example, (Balashova 2015: 171–172; Lakoff 2004: 208; Black 1990: 162) and which underlie our understanding of them as separate types of semantic derivation.

## Materials and Methods

A number of works have appeared recently that are devoted to the study of metaphor in “special-purpose languages” (Tikhonova 2021; Zubkova 2016; Berger, Jaekel 2015; Semino, Demjen, Demmen 2018). As for economic discourse, the works closest to our topic of research are those of L. V. Ivina (Ivina 2018) and G. N. Aleksandrova<sup>5</sup>, although neither deals with the discursive practice of English-language economic discourse as textbooks as a separate subject of study.

In this paper, we use the rather succinct definition of *term* proposed by G. N. Aleksandrova after having studied numerous works in this area: “a term is a normative unit of language (a word, a set phrase or a semantic variant thereof) that denotes a scientific concept related to a special subject area”<sup>6</sup>.

In light of this, the choice of sources of the empirical material for this study is important. These are:

<sup>4</sup> Ibid. P. 18.

<sup>5</sup> Aleksandrova G. N. 2006. *Sootnoshenie znakovoy struktury i funktsij terminologicheskikh i quasiterminologicheskikh jazykovykh edinits [Interrelation between sign structure and functions of terms and quasiterms]*. Summary of doctoral dissertation. Samara State Social and Pedagogical University.

<sup>6</sup> Ibid. P. 9.

1. L. Gayle Rayburn. 1989. *Principles of Cost Accounting. Using a Cost Management Approach* (4th edition).
2. Erich H. Helfert. 2001. *Financial Analysis Tools and Techniques. A Guide for Managers*.
3. Hal R. Varian. 2005. *Intermediate Micro Economics. A Modern Approach* (7th edition).
4. Robert J. Carbaugh. 2005. *International Economics* (10th edition).

Five hundred examples were selected from these works using continuous sampling.

The following methods and techniques were used to describe the structural and semantic characteristics of secondary nomination units: analysis of free associations; elements of formal logic; and elements of cognitive analysis.

## Research Procedure

### Simulative Secondary Nomination

Our analyses of empirical material are based on two structural and semantic criteria: 1) a model of the term used; and 2) the sentence type.

Sentence type is understood here as either definitional or non-definitional sentences. In the material used in this study, the former include:

- real definitions; these kinds of definitions indicate the distinctive features of a named object<sup>7</sup>; in our case, these are sentences that contain the names of both the target and source domains;
- operational definitions, “in which the properties of a named object are determined by operations with this object<sup>8</sup>; in our case, these are sentences that contain the name of the target domain only, that is, economic terms with a predicate verb expressing the function of the object designated by the term;
- sentences containing both types of definition: real definitions in the main clause, and operational definitions in the subordinate clause;
- nominal definitions, “which are used to interpret the meaning of a word”<sup>9</sup>; these are also sentences that contain the names of both domains of cognitive metaphor, but act as verbs (not nominal, like real definitional sentences).

We believe that definitional sentences are the “material embodiment” of the secondary nomination process. Non-definitional sentences only contain the name of the target domain.

<sup>7</sup> Rozdenstvenskij Y. V. 2002. *Lekcii po obshchemu yazykoznaniyu* [Lectures on General Language Science]. Dobrosvet. P. 74.

<sup>8</sup> Ibid.

<sup>9</sup> Ibid.

**Real definitional sentences** contain the following one- and two-component models of economic terms:

### N MODEL

(1) *If conditions change, management should not feel that the **budget** is a **straight-jacket** and that it cannot be revised* (Rayburn 1989: 565).

(2) ***Inventory** is **evidence** of all management's problems* (Rayburn 1989: 902).

A variation of this model is the combination of a noun with a postposition:

(3) ***"Cash in"** versus **"Cash out"** is the **key driver** to any economic analysis* (Helfert 2001: 26).

All the terms perform a definitional function, "which lies in the ability of the term to serve as a brief definition of the corresponding concept"<sup>10</sup>. Adapting them to the source domains (psychiatry, jurisprudence, technology) allows us to classify them as ontological metaphors (Lakoff, Johnson 2004: 180). The transfer is based on the significative component of the concept of source domain (Balashova 2015: 174), since a function is a certain action or process, that is, something that represents the generalized grammatical meaning of a verb, which, being the predicate in a sentence, corresponds to its (the sentence's) significative level (Arutyunova 1976: 37). This is reflected in the term proposed above for this type of metaphor, namely, an actional metaphor.

In example (3), the name of the source domain represents a double actional metaphor, where the entire holistic expression (including the name of the target domain) can be defined as a pleonastic ontological metaphor. This definition is based on the following considerations: each of the words in the phrase *key driver* (both *key* and *driver*) is itself a metaphor.

A term can also serve as the name of the source domain: (4) *All decisions are economic trade-offs* (Helfert 2001: 23). This produces a conventional metaphor of the structural type (Lakoff, Johnson 2004: 181) because both types of activity (decisions and trade-offs) can be considered material entities.

### N<sub>1</sub> + N<sub>2</sub> MODEL

Terms that fit this model perform both a definitional function (examples (5) and (6)) and an identification function, since "their internal form does not contain all the categorical features of the concept"<sup>11</sup> (examples (7) and (8)).

(5) *Not only is the general operating budget or annual **profit plan** an important **operating tool**, but this plan also represents a formal **communication channel** within a company* (Rayburn 1989: 551).

(6) *Another way to establish labor standards is to use **test runs** which are a last resort if management does not think time studies or past – performance averages are feasible* (Rayburn 1989: 445).

<sup>10</sup> Aleksandrova G. N. 2006. *Sootnoshenie znakovoj struktury i funkcyj terminologicheskikh i quasiterminologicheskikh jazykovykh edinic [Interrelation between sign structure and functions of terms and quasiterms]*. Summary of doctoral dissertation. Samara State Social and Pedagogical University. P. 12.

<sup>11</sup> Ibid. P. 12.

The actional nature of the ontological metaphor in (5) *profit plan = tool* is emphasized both by the meaning of the word itself, which designates the concept of the source domain (the technical field), and by its definition – a word that carries the meaning of action (*operating*). The fact that the name of a second source domain is present (*physics*) allows us to present this metaphor as a whole as a “bi-resource” metaphor: *operating tool = profit plan = communication channel*.

The identifying function of the terms of the target domain is conditioned by the fact that they are ontological metaphors themselves: actional (7) and attributive (8); the source domain in both cases is technology.

(7) *In the end every **value driver** is a **lever** for improved cash flow performance* (Helfert 2001: 8).

(8) *The idea that successive **waves of innovation** are the main **driver** of long-term performance in a new or emerging business – or an existing one, of course appears to be sound...* (Helfert 2001: 3).

The components *driver* and *waves* allow us to reconceptualize combinations: *value driver = a mechanism*, *waves of innovation = sea waves*. That is, these are ontological metaphors where the integral metaphors *value driver = lever*, *waves of innovation = driver* act as complex conceptual metaphors based on two ontological metaphors, the semantization of which is the result of the interpretation of the sentence “not as a general, individual statement, but in an individual context of its functioning” (Gvishiani 2018: 6).

The lexemes *value*, *waves* and *innovation* are widely used in everyday speech, and not always by economists. The meaning of the word *driver* is also known to a fairly large circle of English-speaking recipients: the cognitive background here is knowledge of mechanical and automotive engineering, as well as computer technology. Thus, the word combinations *value driver* and *waves of innovation* do not express all the categorical features of the economic concept they designate due to the complex structure of these concepts, which means these units are unable to perform a definitional function. These arguments serve in the further description as the basis for determining the functioning of a particular metaphor as an identifying metaphor.

Statement (9) below is, by contrast, not a complex metaphor, but a simple conceptual one, since the name of the target domain is a contextual metaphor that contains a “guessing” word (Moskvin 2006) (*competitors*), indicating that it belongs to the domain of economic discourse:

(9) *‘Competitors’ trash is a fair game once it leaves their offices – that is why there are shredders* (Rayburn 1989: 40).

Further, example (10) illustrates the use of an acronym, which performs a cumulative function<sup>12</sup>:

<sup>12</sup> Ibid. P. 15.

(10) *It (WTO) is also a **watchdog** of international trade, regularly examining the trade regimes of individual members* (Carbaugh 2005: 181).

The preliminary findings of our analysis of semantic derivation in sentences (real definitions) can be summarized as follows. With the N model, there is an unambiguous correlation between the model itself and the function of the term as a designator of the concept of the target domain, as well as an unambiguous correlation between the type of cognitive metaphor (ontological/conceptual) and the status of the term (the name of the target/source domain), respectively.

With the N1 + N2 model, the metaphorization process is characterized by cause-and-effect relationships: ontological metaphor as the name of the target domain > identifying function > conceptual metaphor

**Sentences that combine real and operational definitions** contain the same models of terms, with rare exceptions. One of their distinguishing features is that they are distributed across the domains that make up the cognitive metaphor. The N model describes terms that have a definitional function, the name of the target domain in an ontological metaphor. The source domain is technology:

(11) *New **investment** is the **key-driver** of growth strategies that cause an enhanced shareholder value* (Helfert 2001: 29).

(12) *In the United States, **trade** is the **machine**, that turns computer software, which the United States makes very well, into CD players, baseballs, and other things that it also wants, but does not make quite so well* (Carbaugh 2005: 22).

### Adj + N MODEL

In example (13), the name of the target domain is a metaphorized economic term that uses the Adj + N model, in which the definition (*financial*) places the entire sentence within the sphere of economics, thus expressing a complicated ontological metaphor. The function of this term – the name of the source domain – is also definitional:

(13) *Securities are **financial instruments** that promise certain patterns of payment schedules* (Varian 2005: 197).

Example (14) is a complex conceptual metaphor in which both domains are terms that belong to the N1 + N2 model. However, the target domain term performs a definitional function, and source area term an identification function, since this is a similitive secondary nomination, which is an ontological metaphor:

(14) *In this situation, **machine-hours** is the **cost-driver** which causes a certain pool of costs to increase* (Rayburn 1989: 224).

In **sentences that are nominal definitions**, the definitional and identifying functions of terms are “assigned” to their respective models: the N and Adj + N models perform a definitional function, while the N1 + N2 model performs an identifying function. In the latter case, we should note that the term itself is an attributive metaphor. The source domain is rather diverse, although, as in the previous examples, technology dominates.

(15) *Also, companies hold **inventory** as a **buffer** at work centers ...* (Rayburn 1989: 882).

(16) *The budgeting process also fails if management views **budgets** as a **scapegoat** on which all the company's problems can be blamed* (Rayburn 1989: 546).

(17) ***Foreign trade** is viewed as a **channel** through which people in different nations make contacts* (Carbaugh 2005: 304).

As we can see, the indicators of functional transfer here are the definition at work and the predicates of subordinate clauses, expressed by action verbs, which is prescribed by the name of the target domain.

A consequence of the metaphorical nature of the name of the target domain is not only its identifying function, but also a complicated ontological metaphor at the level of holistic expression.

(18) *When in fact **cash flows** are increasingly being recognized as the real key to building value...* (Helfert 2001: 16) (*building* is an indicator of a functional metaphor here).

Conceptual metaphors are presented in those sentences where the names of source domains are a means of increased figurativeness, including idioms (*penny-pinching; beggar-thy-neighbor policies*):

(19) *The word "**budget**" often represents a penny-pinching, negative brand of managerial pressure* (Rayburn 1989: 56).

(20) *It is little wonder that **traffic restrictions** designed to enhance nation's standard of living at the expense of its trading partner are referred to as beggar-thy-neighbor policies* (Carbaugh 2005: 131).

One preliminary conclusion we can make after analysing this empirical material is that there is an unambiguous correspondence between the type of definition expressed by a sentence and the structural features of its proposition.

**Sentences that are operational definitions** and contain a secondary nomination are extremely rare in the empirical material we have examined. Such instances are exceptions. For example:

(21) *The **credit slip** transfers the materials as accountability from the production department back to the storekeeper* (Rayburn 1989: 101).

It is more common to see a combination of the operational and nominal types of definition. The names of the source domain serve as indicators of the latter, executed using the conjunction as:

(22) *Second, the **dollar** serves as a **safe haven** at times of political and economic uncertainty* (Carbaugh 2005: 270).

(23) ***Standard costs** are closely related to budgets because they serve as **building blocks** for the construction of the budget* (Rayburn 1989: 551).

As we can see, all of these cases are examples of simple ontological metaphors.

**In non-definitional sentences**, the actional metaphor itself contains the name of the source domain, since these are nominal two- or three-component models in which the term is the name of the target domain. A consequence of this structure is that the term-component of the metaphorized term, which already carries out an identifying function, loses its definitional function:

(24) *Since it is difficult to protect lead time and inventory usage with a high degree of certainty, an **inventory buffer**, or safety stock, is needed to protect the company from stockouts* (Rayburn 1989: 1197).

(25) *Companies that engage in value-based management ... develop relationships in their planning models and operational systems that focus on **value drivers** and shareholder value creation* (Helfert 2001: 331).

(26) *Regardless of whether **tax shield** is considered, the computations assume that all sales are collected in cash* (Rayburn 1989: 672).

(27) *How did President Hoover fall into such a **protectionist trap**?* (Carbaugh 2005: 176).

(28) *Our main emphasis is the relation between costs and the one important variable that affects **costs** – **cost drivers** or activity levels* (Rayburn 1989: 155).

In example (29), the term *globalization* is also positioned in the economic sphere, since this is its primary source:

(29) ... *and this puts sands in the **gears of globalisation*** (Carbaugh 2005: 24).

All the actional metaphors we have described are, in the cognitive sense, simple ontological metaphors, since the names of the source domains are material objects and, with very few exceptions, objects that belong to the sphere of technology.

Further, we will introduce actional metaphors that are not related to the term system of economics but are found in the empirical material we studied and which, in our opinion, complement the subject of this paper.

We also include sentences whose propositions contain the names of both domains of the metaphor, that is, real and operational definitions. In the latter, adverbials of purpose act as indicators of the actional nature of the metaphor:

(30) *The European Union's **emphasis** on health concerns was thus a smokescreen for protecting an industry with competitive disadvantage, according to the United States* (Carbaugh 2005: 167).

(31) *The **United States** became an attractive **destination** for foreign investment* (Carbaugh 2005: 386).

(32) *Moreover, developing countries worry that the Europeans want to use **environmental issues** as a **backdoor** to protectionism* (Carbaugh 2005: 189).

Conceptual metaphors are formed on the basis of the idiomatic nature of the name of the source domain:

(33) *An even more stringent **test** is the **acid test**, or quick ratio, which is calculated on a portion of current assets ...* (Helfert 2001: 127).

(34) *Instead of adopting fixed or floating rates, why not try a compromise **approach**, the **crawling peg**?* (Carbaugh 2005: 457).

Verbal devices can also act as conceptual metaphors:

(35) *The best managed companies **tailor** their information systems and management incentives to minimize funds use relative to the level of each activity* (Helfert 2001: 89).

(36) *Since objectives and constraints differ among companies, budgets should be **tailor-made** for the individual company* (Rayburn 1989: 76).

The examples of non-terminological actional metaphors taken from empirical materials allows us to highlight the ways in which they differ from terminological actional metaphors: in the former, the names of the source domains are extremely diverse; in the latter, however, a priority area dominates – namely, technology, which we do not see in non-terminological metaphors.

It thus follows that metaphorized terms are described through artificial systems, that is, there is a tendency towards uniformity of the secondary semiotic code.

## Indicative Secondary Nomination

### Metonymy

In our empirical material, metonymic vocabulary is represented by specialized naming units. In order to distinguish such naming units from terms, we will use the word *nomen* here: “a word or phrase of a special-purpose language that labels objects of a particular branch of science and technology”<sup>13</sup>. The names of organizations make up the largest group of *nomens*: *factory*, *corporation*, *company*, *firm*, *business*, *bank*, *utility*, *organization*, etc., as well as institutions that regulate economic activity, that is which constitutes this kind of metonymy as the “institution for the person responsible” (Lakoff, Johnson 2004: 65).

(37) *Initially there is no basis for trade, because each **firm** realizes a production cost of \$ 10.000 per auto* (Carbaugh 2005: 75).

(38) *Also, a single monetary policy, run by an independent central **bank**, should promote price stability* (Carbaugh 2005: 268).

(39) *Because of heavy fixed costs in electricity production, **utilities** attempt to keep plants operating close to full capacity* (Carbaugh 2005: 79).

This type of metonymy is more pronounced with proper names (i.e. company names):

(40) ***Maidwell** uses a standard cost system in accounting for materials* (Rayburn 1989: 482).

(41) ***Honda** maintains both American and Japanese websites* (Carbaugh 2005: 26).

(42) ***Airbus** has more than 1,500 suppliers in 27 countries...* (Carbaugh 2005: 8).

(43) *If **GE** and **Boeing** each set their prices independently, they could decide to set their prices too high* (Varian 2005: 653).

Conversely, if the *nomen* includes the words *organization*, *association*, and the like, its metonymic nature is somewhat erased and starts to resemble personification:

(44) *Import quotas on manufactured goods have been outlawed by the **World Trade Organization*** (Carbaugh 2005: 140).

<sup>13</sup> Ibid. P. 9.

(45) *The National Association of Accountants has issued statement on Management Accounting Number 4B, ...* (Rayburn 1989: 261).

At the same time, combinations with the word *board* are classic metonymies, even if they contain the names of animate objects. Moreover, they are terms, and not *nomens*:

(46) *The president receives authority from the board of directors* (Rayburn 1989: 16).

(47) *The most common form in which basic financial information is available publicly [...] is the set of financial statements issued under guidelines of the Financial Accounting Standards Board of the public accounting profession and governed by the US Securities and Exchange Commission* (Helfert 2001: 37).

Metonymies of this type thus, first of all, form the “*nomens* versus terms” opposition. Second, they have a field structure: core (terms that include the word *board*), perinuclear zone (*nomens* that are proper names), near periphery (*nomens* that are the names of institutions), and remote periphery (*nomens* containing the word *organization*, etc.).

The following sentence contains a metonymic term of the form “a proper name instead of an object”:

(48) *The traditional name of this economic model is the **Robinson Crusoe** economy, after Defoe’s shipwrecked hero* (Varian 2005: 591).

In sentence (49), the term is formed on the basis of a metonymy of the form “de-humanizing” (Lakoff, Johnson 2004: 66):

(49) *However, regulations provide **households** with cleaner water and air ...* (Carbaugh 2005: 86).

The same type of metonymy appears in the following *nomen*:

(50) *A total of five **positions** report to Smith: the production vice president, marketing vice president, vice president of quality control, vice president of research, and Jan Brown, controller* (Rayburn 1989: 42).

The “object used for user” (Lakoff, Johnson 2004: 64) type of metonymy (in this case, the word “object” is understood in the broad sense) is represented by terms in (51) and (52), and by commonly used vocabulary in (53).

(51) *Presumably, the domestic **economy** will enjoy a higher average level of productivity and will be more competitive in world markets as a result of such policies* (Carbaugh 2005: 82).

(52) *The **audit** also found that employees were required to work as long as 65- hour weeks, sometimes in unsafe conditions* (Carbaugh 2005: 78).

(53) *Since Leontieff’s time, many other studies have tested the prediction of the factor – endowment model* (Carbaugh 2005: 71).

A similar metonymy, supplemented by the form “activity – result of that activity” – that is, complicated metonymy – is observed in the term in (54) and the idiomatic term in (55):

(54) *The **Clayton Act** eliminates competitive methods considered to be potential weapons of monopoly* (Rayburn 1989: 1062). (Note that the actional metaphor of *methods* = *weapons* here confirms our previous conclusion about the multiplicity of names and source areas for non-terminological words.)

(55) *Economists have termed this the **sheepskin effect**, in pretence to the fact that diplomas were often written on sheepskins* (Varian 2005: 706) (the *sheepskin effect* is a significant increase in income after being awarded a bachelor's or advanced degree).

Thus, metonymies, like metaphors, can be complex. However, there is a significant difference between the two: a complex metaphor is the result of the interaction of the names of the target and source domains; it is a holistic expression in definitional sentences. Meanwhile a complex metonymy is the result of combining two types of metonymies in a single word. In other words, the complexity of a metaphor is based on structural and semantic factors, while the complexity of metonymy is based on semantic factors only.

Local (or locative) metonymies are represented by several types:

(56) ***London** remains the largest center for foreign-exchange trading* (Carbaugh 2005: 17).

This statement actualizes the “place for institution” metonymy, which is indicated by the addition of *for foreign-exchange trading*.

In (57), the noun *help* serves as the indicator of the complex metonymy *Washington* (“place for institution and person”), while *Detroit* is a metonymy of the “place for person” form:

(57) *With or without Washington's help, the restructuring that may lie ahead for Detroit could be deep and painful* (Carbaugh 2005: 184).

Another type of local metonymy – “place for event” – is presented in (58), although this metonymic expression is rather a term:

(58) *An example of fixed exchanges rates is the **Bretton Woods System*** (Carbaugh 2005: 448). (In 1944, representatives of 44 countries met in Bretton Woods, New Hampshire, to develop a new system of international monetary relations and trade settlements.)

Our analysis of this type of indicative secondary nomination allows us to conclude that metonymic vocabulary forms a polynomial opposition according to the “types of metonymy” criterion: terms and nomens – terms – terms and common lexis (toponyms) – common lexis (toponyms).

### Synecdoche

The most common type of synecdoche that we encountered in the material studied was *pars pro toto* (a “part (taken) for the whole”). These can be both economic terms and common vocabulary. Examples of the former include:

(59) *At present, the company has a **work force** of 40 employees, a reduction from the 100 workers employed during peak production* (Rayburn 1989: 41).

(60) Besides **blue-collar** jobs, service and **white-collar** jobs are increasingly vulnerable to operations being sent overseas (Carbaugh 2005: 23).

Examples of the latter include:

(61) Although **The Big Three** (GM, Ford, Daimler Chrysler) controlled more than 90 percent of the US market ... (Carbaugh 2005: 14).

(62) Modern trade theory is the product of an evolution of ideas in economic **thought** (Carbaugh 2005: 28).

(63) Remember, the only time cash actually changed **hands** was when the assets were originally acquired (Helfert 2001: 66).

The *totum pro parte* (“the whole for a part”) type of synecdoche is far less common, and is a *nomen*:

(64) Today’s business **world** has infinite variety (Helfert 2001: 24).

The empirical material we have looked suggests a certain trend in terms of the use of synecdoche: the “part for the whole” type of synecdoche is more universal and is inherent in terms and common vocabulary, while the “whole for a part” type is more specialized and characteristic of *nomens*.

Some cases exhibit a combination of the *totum pro parte* synecdoche and “institution for the person responsible” metonymy. These are typically toponyms: the names of states, countries and their administrative units, or common nouns that carry the same meaning, that is, commonly used vocabulary for this discursive practice. For example:

(65) ...why **Europe** and the **United States**, for example, trade in such great volume (Carbaugh 2005: 73).

(66) The **Netherlands** import Loewenbraeu beer while exporting Heineken (Carbaugh 2005: 77).

(67) As **China** produces fewer aircraft, its demand for capital decreases, and the price of capital falls (Carbaugh 2005: 65).

(68) However, **California** is a major importer of French wines as well as a large exporter of its own wines (Carbaugh 2005: 77).

(69) Given these circumstances, a **nation** will export that commodity for which a large amount of the relatively abundant (cheap) input is used (Carbaugh 2005: 64).

(70) ... **a country** specializes in the manufacture of large amounts of a limited number of goods and trades for the remaining goods (Carbaugh 2005: 5).

The transfer process in these cases can be characterized as follows: the whole (nation/country/state, etc.) for the part (institution) – synecdoche; and institution for the person responsible – metonymy. Thus, in such cases, the mechanism of metonymy is activated.

This reasoning provides sufficient grounds for a discussion about semantic derivation and secondary nomination, since, as far as we know, there is very little in the linguistic literature about these kinds of mixed or intermediate types, unlike the phenomenon of metaphonymy, which has received a great deal of attention in modern cognitive linguistics, many of which stress that it is characteristic of the English and German languages.

## Combining Similitive and Indicative Secondary NOMINATION

Existing definitions of metaphonymy emphasize the fundamental interaction of metaphor and metonymy (for more detail on this, see: (Balashova 2015; Jakobson 2002). Several works note the precedence of the process of metonymization in the formation of semantic derivatives of this type – a “metaphor from metonymy” (Goossens 2002: 350; Barcelona 2003).

As our material shows, metaphorization is a priority in derivative phrases. We base this conclusion on the distribution of the components of the phrase: an actional metaphor in preposition to a metonymy of the “institution for the person responsible” type in example (71), the second phrase in example (72), and synecdoche–metonymy (described in para. 3.2.2. above) (example (73) and the first phrase in example (72)), or an actional metaphor in the predicate position – that is, when the metaphor is defining (new) and metonymy is defined (known).

(71) *Delta’s Indian **subsidiary** returns its earnings to the parent company* (Carbaugh 2005: 52) (a metonymy of the “organization for the person responsible” type).

(72) ... *including both the **source country** (complex metaphonymy) where the parent **organization** (simple metaphonymy) is located and the **host country** (complex metaphonymy) where subsidiary firms are established* (Carbaugh 2005: 303).

(73) ***Donor countries** determine eligibility criteria, product coverage, the size of preference margins, and the duration of the preference* (Carbaugh 2005: 231).

As follows from the above examples, complex metaphonymy is a combination of synecdoche and metonymy, the formation process of which can be described in the following way: in the phrases *source country*, *host country* and *donor countries*, the second component is interpreted as a synecdoche based on the *totum pro parte* relation, which, in turn, unfolds as a chain of metonymies: country for the organization – organization for the person responsible. These prescriptions are what led to their being interpreted as complicated metaphonymies.

An actional metaphor in the predicate position in the formation of metaphonymy is far less common, and, like an ordinary metaphor, in a sentence of the “real definition + operational definition” type.

(74) *Google and Yahoo are two popular search engines that make money by selling ads triggered by search queries* (Varian 2005: 318).

As we can see, all the cases of metaphonymy presented above, including complex metaphonymies, contain ontological metaphors as an integral part.

## Results and Discussion

Our analysis of empirical material allows us to put the following theses forward for discussion. The difference between a similitive secondary nomination and an indicative secondary nomination arises as a result of different though processes: a similitive

nomination involves the assimilation of one integral object to another; an indicative secondary nomination involves the identification of one integral object with another integral object (metonymy) or one integral object with a part of another object (*pars pro toto* synecdoche), or the identification of a set of objects (or a non-discrete integral object) with another integral object (*totum pro parte* synecdoche).

Sentences that are real and nominal definitions contain terms – conceptual metaphors of both simple and complex structures. In the former, a simple conceptual metaphor is a consequence of an ontological metaphor as a name for the source domain, while a conceptual metaphor of a complex structure arises as a result of the interaction of ontological metaphors as names for both domains. In sentences that are nominal definitions, simple conceptual metaphors are a result of the presence of an idiomatic nomination in the source domain.

Types of metonymies can be represented as a polynomial opposition in accordance with the criterion “stylistic affiliation of metonymy”: metonymic terms and *nomen* – metonymic terms – metonymic *nomen* – metonymic terms and non-specialized vocabulary – non-specialized vocabulary. The most common type of synecdoche is *pars pro toto* synecdoche. On the other hand, the mixed type of “synecdoche-metonymy” is formed on the basis of *totum pro parte*, which also determines cases of complex metaphonymy. Consequently, this type of synecdoche is what produces the mixed type of secondary nomination: similitive and indicative (for metaphonymy), as well as the mixed type of indicative, which can be represented as the sequence synecdoche > metonymy > metaphor > metaphonymy. The empirical material we used in this study allows us to propose the hypothesis that the actional metaphor serves as the fundamental basis for determining the possibility of transitional types of semantic derivatives emerging.

## Conclusion

1. Our analysis demonstrated the constructiveness of addressing thought in the logical form (that is, reliance on a sentence-statement) as the basis for identifying the mechanism for transferring a name from one object to another.

2. The features of these texts include the presence of actional metaphors and metonymies with a complex structure in the cognitive aspect. We can confidently argue that it is the secondary nomination of the source domain in actional metaphors that determines their structural and semantic complexity in the cognitive aspect.

3. Both types of secondary nomination in this discursive practice are systemic in nature: metaphor is described in terms of another artificial system, primarily technology; metonymies have a field structure and are actualised through specific oppositions.

**About the Author:**

**Svetlana P. Anokhina** – Dr. Sci. (Philology), Professor in the Theory and Practice of Translation Department at Togliatti State University (Russia). Email: Anokhinasvetlana2016@yandex.ru

**Conflicts of interest:**

The author declares no conflicts of interest.

**References:**

- Aleksejeva L. M., Mishlanova S. L. 2016. Permskaya shkola metafor [Metaphor school in Perm]. *Vestnik permskogo universiteta. Russijskaya i zarubezhnaya filologia [Bulletin of Perm University. Russian and Foreign Philology]*. 3(35). P. 122–133.
- Aristotle. 1983. Poetika [Aristotele's Poetics]. In *Sochineniya v chetyrekh tomakh, tom 4 [Aristotele's works in 4 volumes. Vol. 4]*. Mysl'. P. 645–681. (In Russian)
- Arutyunova, N. D. 1976. *Predlozhenie i ego smysl [The Sentence and Its Meaning]*. Nauka. (In Russian)
- Balashova L. V. 2015. Dinamicheskaya koncepciya metafor: ot Aristotelya do sovremennoj kognitivnoj lingvistiki [Dynamic Concept of the Metaphor: From Aristotle to Modern Cognitive Linguistics]. *Vestnik Omskogo universiteta [Bulletin of Omsk university]*. 2. P. 169–177. (In Russian)
- Barcelona A. 2003. On the Plausibility of Claiming a Metonymic Motivation for Conceptual Metaphor. In A. Barcelona (ed.), *Metaphor and Metonymy at the Crossroads: A Cognitive Perspective*. Mouton de Gruyter. P. 31–58.
- Black M. 1990. Metafora [Metaphor]. In *Teoriya metafor [Metaphor Theory]*. Progress. P. 153–172. (In Russian)
- Berger A., Jaekel O. 2015. The Cognitive Role of Metaphor in Teaching Science: Examples from Physics, Chemistry, Biology, Psychology and Philosophy. *Philosophical Inquiries*. 3. P. 89–112. DOI: <https://doi.org/10.4454/philinq.v3i1.116>
- Borodulina M. J., Makejeva M. N. 2018. Metafora "INTERNET = Vodnoje prostranstvo" v pechatnykh SMI (na osnove content-analisa resursov nacional'nogo korpusa russkogo yazyka) [Metaphor "INTERNET = Water Space" in Mass Media (Based on a Content Analysis of the Russian National Corpus)]. *Voprosy kognitivnoj lingvistiki [Issues of Cognitive Linguistics]*. 2. P. 13–20. (In Russian).
- Charteris-Black J. 2011. *Politicians and Rhetoric. The Persuasive Power of Metaphor*. Palgrave Macmillan. DOI: 10.1057/9780230319899
- Goosens L. 2002. Metaphonymy: The Interaction of Metaphor and Metonymy in Expression for Linguistic Action. In R. Dirven, R. Pörrings (eds.). *Metaphor and Metonymy in Comparison and Contrast*. Mouton de Gruyter. P. 349–377.
- Gvishiani N. B. 2018. Referenciya i representaciya v structure konceptul'noj metafor (v aspekte kompyuterno-korpusnogo issledovaniya i perevoda) [Reference and Representation in the Structure of Conceptual Metaphor (Computer Corpus and Translation Aspects)]. *Voprosy kognitivnoj lingvistiki [Issues of Cognitive Linguistics]*. 3. P. 5–15. (In Russian)
- Ivina L. V. 2018. Kognitivnyya osnovayniya zoomorfnoj metafor v investicionnoj terminologii anglijskogo yazyka [Cognitive Grounds of Zoomorphic Metaphor in English Investment Terminology]. *Vestnik Moskovskogo gosudarstvennogo lingvisticheskogo universiteta. Gumanitarnye nauki [Bulletin of Moscow State Linguistic University. Humanities]*. 4. P. 189–198. (In Russian)
- Jakobson R. 2002. The metaphoric and metonymic poles. In R. Dirven, R. Pörrings (eds.). *Metaphor and Metonymy in Comparison and Contrast*. Mouton de Gruyter. P. 41–47.
- Kolesov V. V. 2012. Ostavit' sled ... [Leave a Trace ...]. *Vestnik Omskogo universiteta [Bulletin of Omsk University]*. 3. P. 253–257. (In Russian)

Krasavskij N. A. 2020. Metafora kak sposob eksplikacii revnosti v russkikh i nemeckikh khudozhestvennykh tekstakh [Metaphor as a Way of Explicating Jealousy in Russian and German Literary Texts]. *Izvestiya Volgogradskogo gosudarstvennogo pedagogicheskogo universiteta. Pedagogicheskie nauki. Filologicheskie nauki* [News of Volgograd State Pedagogical University. Pedagogical Sciences. Philological Sciences]. 1(144). P. 211–216. (In Russian)

Lakoff J., Johnson M. 2004. Metafora, kotorymi my zhivem [Metaphors We Live By]. Editorial URSS. (In Russian)

Lakoff J. 2004. Zhenshtiny, ogon' i opasnye veshchi: chto kategorii jazyka govoryat nam o myshlenii [Women, Fire and Hazardous Things: What Language Categories Tell Us about Thought]. *Yazyki slavyanskoj kultury*. (In Russian)

Marinchenko I. A. 2018. Vestimentarnaya metafora v parfyumernom diskurse [Verbal Metaphor in Perfume Discourse]. *Voprosy kognitivnoj lingvistiki* [Issues of Cognitive Linguistics]. 4. P. 101–107. (In Russian)

Moskvin V. P. 2006. Russkaya metafora: ocherk semioticheskoy teorii. Moscow, LENAND. (In Russian)

Schulzek D. 2014. A Frame approach to metonymical process in some common types of German word formation. In T. Gamerschlag, D. Gerland, R. Osswald, W. Peterson (eds.). *Frames and Concept Types*. Springer International Publishing. P. 221–242.

Semino E., Demjen Z., Demmen J. 2018. An Integrated Approach to Metaphor and Framing in Cognition, Discourse, and Practice, with an Application to Metaphors for Cancer. *Applied linguistics*. 39(5). P. 625–645. DOI: <https://doi.org/10.1093/applin/amw028>

Shutova E., Kiela D., Maillard J. 2016. Black Hotels and White Rabbits: Metaphor Identification with Visual Features. HLT-NAACL.

Tikhonova I. B. 2021. Metaforicheskije naimenovaniya khimicheskikh veshchestv kak sredstvo vizualizacii khimicheskoy struktury i kognitivnogo, odelirovaniya v anglijskom khimicheskom diskurse [Metaphor Naming Units of Chemical Substances as a Means of the Visualizing Chemical Structure and Cognitive Modeling in English Chemical Discourse]. *Izvestiya Volgogradskogo gosudarstvennogo pedagogicheskogo universiteta. Pedagogicheskie nauki. Filologicheskie nauki* [Bulletin of Volgograd State Pedagogical University. Pedagogical Sciences. Philological Sciences]. 1(154). P. 141–146. (In Russian)

Zadornova V. Y., Matvejeva A. S. 2017. *Konceptualnye metafory v angloyazychnoj poesii* [Conceptual Metaphors in English Poetry]. University Book. (In Russian)

Zubkova O. S. 2016. Metaforicheskije modelirovaniye sovremennogo kommunikativnogo prostranstva professionalnykh yazykov s ispolzovaniem tropeicheskoy leksiki [Metaphoric Modeling of the Modern Communicative Space of Professional Languages Through the Use of Tropes]. *Teoriya yazyka i mezhkulturnaya kommunikaciya* [Language Theory and Crosscultural Communication]. 1. P. 16–21. (In Russian)