

## CHAPTER 10

# LINGUISTIC AND COGNITIVE BASES OF DIFFERENTIATION OF CONCEPTUAL METAPHORS AND METONYMY

SVETLANA V. KISELEVA  
NELLA A. TROFIKOVA  
IRINA B. RUBERT

### **Introduction**

Up to now, the scientific community has been discussing the essence of metaphor and metonymy. In the paradigm of cognitive science, which explores the processes of perception, categorization and understanding of the world, metaphor and metonymy are considered as the manifestation of analog capabilities of the human mind. The relevance of metaphorization and metonimization of speech lies in the fact that these are ways to connect objective and subjective reality in order to convey to the listener not only the meaning of the statement, but also our internal state and attitude to what was said. That is, metaphorization and metonimization in speech are ways of combining our thinking with language, which allows people to communicate most effectively.

Two different ways to perceive the world and therefore two types of operations with signs – metaphor and metonymy – determine the need to study cognitive mechanisms of their generation and functioning. The goal of this paper is to determine and to justify the linguistic and cognitive grounds of differentiation of conceptual metaphor and metonymy.

Besides an introduction and a conclusion, the study consists of three main parts, the first of which is entitled “Metonymy in cognitive theories”. This part offers a brief overview of the character and orientation of the different approaches to the study of metonymy. The second part

(“Metaphor in cognitive theories”) presents the theories of conceptual metaphor and the cognitive classification of metaphors. The third part of the paper considers approaches to the distinction between conceptual metaphor and metonymy.

## 1. Metonymy in cognitive theories

In linguistics, metonymy is traditionally understood as a mechanism for a word to acquire a new meaning and accordingly to expand the semantic volume of a word. This interpretation of metonymy was the basis for analyzing metonymy as a stylistic figure, exploring it as a mechanism and result of the development of secondary meaning of the word related to the primary, but without imagery.

Cognitive linguistics expanded the interpretation of metonymy and separated cognitive metonymy (a mechanism for the conceptualization of reality) from linguistic metonymy (a semantic mechanism for developing the meaning of a word). The well-known hypothesis of R. Jackendoff says that information obtained from outside is collected and processed at the mental level in the human brain (Jackendoff 1984: 83). As a result, a certain information structure is formed, and it reflects a person’s cognitive experience in the form of certain “quanta” of knowledge – concepts (Concise Dictionary of Cognitive Terms 1996: 90). Metonymy is present in this conceptual system as a cognitive model – a conceptual structure between the elements of which there is a substitution relation (Lakoff 1998: 32). In this case, conceptualization is understood as the primary formation of concepts (Concise Dictionary of Cognitive Terms 1996: 93).

Nowadays, cognitive linguistics, presenting metonymy as a conceptual phenomenon and as a fundamental technique of cognition and understanding of reality, as one of the mechanisms of cognitive modeling, explores metonymy from the perspective of:

1) **Theory of conceptual metaphor** of G. Lakoff and M. Johnson: the linguistic function of metonymy is indirect reference, when one entity substitutes another. On the other hand, metonymy goes beyond the scope of a linguistic phenomenon and functions in our conceptual system in the form of sustainable, regular metonymic concepts (for example, part-whole), systematized in our mind and reflected in the culture through the language. Metonymic concepts allow us to conceptualize one entity through its relation to another. They present in a structured fashion not only our language, but also our thoughts, attitudes and actions. They are based on our experience, and this basis is more obvious and “tangible” than

metaphorical concepts, as it implies direct physical or causal associations (Lakoff, Johnson 1980: 35-39).

2) **Theory of prototypes and idealized cognitivemodels** (Z. Kövecses, G. Lakoff, G. Radden, etc.) explains prototypical effects in categories using a metonymic process in which parts of a category represent the whole category: for example, in Western culture, the concept of *mother* is prototypically associated with the concept of *housewife mother*. The relationship between the mother and the housewife is metonymic and exists only at the conceptual level: the category *mother* metonymically includes the sub-category *housewife mother*. Social stereotypes, in particular, are the types of metonymic models in which the representative of a category stands instead of the category as a whole.

Manifestations of prototypicality in the form of “prototypical” effects lies in the fact that the central members of the category, ones that are closer to the prototype are faster identified, acquired, used more often than non-central ones, that is, they are used to perceive the category as a whole. It is especially vivid when a part (an element, subspecies, etc.) is used instead of the whole, and that is the metonymic categorization model (Kubryakova at al. 1996: 144-145).

3) **Theory of frame semantics** (A. Blank, P. Koch, A.N. Baranov, etc.): the base to form the figurative meaning is not in the meanings of the multivalent word, but in the frames and scenarios associated with them. In this case, the metonymic meanings of words are described as the result of conceptual transformations of frames (scenarios) and their slots/subslots (Baranov, Dobrovolsky 1997: 3).

The frame analysis of the metonymic transformations of multivalent nouns allows us to make a conclusion that the essence of metonymy as a cognitive mechanism lies not only in the enumeration of various models or types of metonymic relations, but, rather, in determining the principles which let us choose one of many categories as a source or a target of metonymic transformations.

4) **Theory of profiling or active zones** of R. Langacker (reference or conceptual phenomenon) considers metonymy not only as a conceptual phenomenon, but also as a cognitive process giving us access to one mental entity through another. According to this theory, the word gets a specific meaning as a result of profiling, that is, the selection of an element in a certain conceptual area. The metonymic meaning of the word corresponds to the so-called active zone of the profiled element – that part of it that is directly involved in the situation described (*She heard the piano* – the

active area of the piano profile – *sound*) (Langaker 1991: 189-201). R. Langacker explains the cognitive essence of metonymy as follows:

An entity, designated with the help of metonymy, serves as a reference point, which opens mental access to a desired goal (that is, an entity to which we refer) (Langaker 1993: 30).

Thus, we do not just use one nomination to designate another, but perform a complex mental operation to access some mental entities with the help of others.

5) **Theory of conceptual integration** of G. Fauconnier and M. Turner considers metonymy as a mechanism for new meaning acquisition, and one of the cognitive processes for creating a new meaning is the conceptual derivation. Conceptual derivation implies the presence of two or more source spaces (mediated by a linguistic form); as a result of their mutual influence, as well as due to the action of certain mechanisms, a new concept arises. As factors leading to a conceptual derivation, it is proposed to consider, firstly, the interaction of concepts, secondly, the ability of the concept to form mental spaces and mental fields.

The ability of the concept to form the mental space and the mental field is a consequence of the fundamental capability of human consciousness to divide things into parts/whole. Due to this capability, a person is able to switch attention from a concept represented by a linguistic unit to a conceptual structure (mental field), against which this linguistic unit is understood. A concept represented by a language unit is closely related to the concept of a higher level of abstraction, which acts as a mental field. The latter ensures the derivation of a new concept. It acts as a source of additional information necessary for the emergence of a new concept (conceptual structure), since a new concept does not always arise out of the characteristics of the original concepts that have been explicitly borrowed.

All of the above corresponds to the characteristics of conceptual metonymy, and, therefore, means that the theory of conceptual integration can be applied not only to the conceptual metaphor, but even to the same extent to the conceptual metonymy.

6) **Theory of conceptual semantics** (M. Johnson, G. Lakoff, E.V. Paducheva, etc.) considers metonymy as a process (shift of attention focus), and as a result (conceptual metonymy, metonymic concept). Metonymy is regarded in the context of the notion “denotative situation”, which means a fragment of reality that has to be conceptualized. E.V.

Paducheva points out that the same denotative situation can be differently conceptualized in a language. At the same time

the lion's share of the differences between different conceptualizations of one situation falls on two parameters — estimation and a focus of attention (Paducheva 2004: 156).

The basis for metonymic shifts is the selectivity of human perception, which is reflected in the language in the form of various shifts in the focus of attention when describing the same extra-linguistic situation. In the process of conceptualizing some aspects of reality are emphasized, actualized, while others are blurred, shaded in the background: there takes place a schematization of concrete reality (Paducheva 2004: 157). But the aspects of the situation that are shaded in this conceptualization are implicitly present in the context of the statement made, they are connected with the actualized aspects by adjacency principle ex. *part – whole, parameter – value, cause – effect*, etc. There we can talk of metonymy.

### **7) Conceptual metonymy in gestalt psychology**

The concept of “prominence” allows talking of the metonymy in terms of gestalt psychology. P. Koch claims that metonymy is based on the relation between the background and the figure (Koch 1999: 151). Each concept embodied in a lexical unit is a figure in relation to another adjacent concept – the background – within the same frame. The figure-ground effect can be represented by the example of the metonymic relations of the part and the whole within the frame, where the whole turns from a background into a figure and represents the whole frame, and the part acts as a figure transforming into the background and represents one of the concepts of this frame (in the "whole-part" metonymy, the reverse occurs). From this point of view, another definition of metonymy can be derived: a process in which

when using a lexical unit, certain pragmatic, conceptual and emotional factors can influence the background concept in such a way, that the figure and the background are interchanged (Koch 1999: 152).

It should be noted that, despite the fact that cognitive linguistics has produced various approaches to the description of the cognitive mechanisms of metonymy, they cannot be considered as contradictory. It is obvious that the discrepancies between the stated approaches are mostly due to difference in terminology, and partly due the point of view and level of abstraction.

## 2. Metaphor in cognitive theories

A metaphor in cognitive linguistics is understood as a mechanism, a process, a result in a single and generalized form, and a form of thinking. If it is necessary to specify the meaning of the term *metaphor*, the following terms are used: metaphorical process, metaphorical meaning, metaphorical model, metaphorization mechanism, etc.

The cognitive theory of metaphor highlights its conceptual properties. It is the study of metaphor as a component of our conceptual system that determines the direction of research of the modern theory of metaphor. In this paper, the metaphor is considered in two aspects: static and dynamic, that is, as a result and as a process. The study of metaphor in statics allows us to see in the language picture of the world the result of the completed process of metaphorization. The dynamic aspect involves the study of the mechanism of creating a metaphor and the emergence of a new unique meaning that occurs every time "here and now".

The most important theories considering conceptual metaphor are the following:

1) **Theory of conceptual metaphor** of G. Lakoff and M. Johnson (metaphor in the static aspect) consider metaphor as a cognitive phenomenon, one of the central processes in the conceptualization of the world, a part of the mental system and language (Lakoff, Johnson 1980; Lakoff 1987; Lakoff, Turner 1989, etc.).

G. Lakoff and M. Johnson have shown that the metaphor, as an essential element of our conceptual system, is an important tool for categorizing the world, structuring perception and sensory experience. The conceptual theory of metaphor is based on the assumption that the knowledge of the world is organized in the form of mental structures – idealized cognitive models (ICM, mental models, cognitive models) (Lakoff 1987). Models are not only the concepts existing separately, but also the communications characterizing position of concepts concerning the category of time, space, the reason, the purpose.

G. Lakoff indicates that cognitive models of different types (propositional, figurative-schematic, metonymic, metaphorical) can be used to describe the categorization process. The latter – metaphorical models – are models of transition from propositional or figurative-schematic models of one area to the corresponding structure of another area. Metaphorical transfer implies the presence of the source area and the target area. During the migration process, the model structure of the source area is transferred to the appropriate structure of the target area. For example: the metaphor

*channel* allows us to move from the knowledge of the movements of objects in containers to the understanding of communication as the movement of ideas in words (Lakoff 1988: 11).

The frame structures the knowledge of a stereotypical, thematically unified situation. This property implies the presence of a conventional beginning in the frames, which is the presence of stable features. These features, as commonly understood, occupy the upper levels of the frame and remain stable constantly.

**2) Theory of conceptual integration (mixing, blending)** of G. Fauconnier and M. Turner develops the theory of conceptual metaphor and examines the metaphor in the dynamics. The essence of the metaphor in this theory is that as the discourse unfolds, as a result of the merger of mental spaces, integrated spaces (blends) appear.

Conceptual integration is described by the authors as the main mental operation underlying the ability of a person to reasoning, making conclusions, decision-making, invention, evaluation, global insight, conceptual compression, manipulation of “diffuse ranges of meaning”, which leads to the creation of a new value, has dynamism and flexibility, is done quickly and unconsciously (Fauconnier 2000). Mental spaces, as defined by G. Fauconnier, are

small conceptual areas (packets), constructed in the process of thinking and speaking, which are created for the purpose of local understanding and action (Fauconnier 1996).

Mental spaces are models of discursive understanding that are created and changed directly in the process of communication. They have considerable flexibility, instability and are not required to maintain consistency and coherence at every moment. Mental spaces are structured through frames and various cognitive models: image-schematic (container, part-whole, top-bottom, source-goal, etc.), propositional (proposition, scenario, feature bundle, taxonomy, radial category), metaphorical, metonymic, symbolic.

Mental spaces are non-linguistic entities. Here the question arises, how do linguistic forms and mental spaces correlate? G. Fauconnier treats linguistic forms as "instructions" in the conceptualization of a situation, language

gives minimal but sufficient information for finding the domains and principles appropriate to the conceptualization of a particular situation (Fauconnier 1996).

G. Fauconnier notes that mental space do not reflect the so-called "objective reality", and embody the image of how a man thinks and says about certain things, and at the same time they do not carry any information about the things themselves (Fauconnier 2000 : 283-304).

One mental space can be structured by knowledge that belongs to different conceptual domains. For example, a mental space that is a scenario of a book purchase situation might include knowledge from conceptual areas such as literature, education, reading, buying, selling, etc. Mental spaces are based on background knowledge, but they are not given to us in some ready form, they arise every time anew. The processes of conceptual integration happen because of man's ability to think figuratively, to establish links between mental spaces and their elements.

Thus, the concept of "ties" (mappings, connections) between mental spaces is the central concept of the theory of conceptual integration. These connections can be metaphorical or metonymical; can be based on identity, similarity, analogy and other pragmatic functions. One of the important advantages of the theory of conceptual integration is the possibility of simultaneous parallel analysis of the most heterogeneous connections established for the generation of a new mental space.

Parallelism between metaphors and underlying literal concepts leads to the existence of three main types of conceptual metaphors:

1) Orientation metaphors structure abstract and subject spheres in accordance with non-metaphorical linear orientations in space, with the oppositions such as *up-down*, *inside-outside*, *deep-shallow*, etc. (Lakoff, Johnson 1980). For example, in the process of conceptualizing *time* the general metaphor of this type is a spatial metaphor *time is landscape we move through*, built on the basis of imaginative schemes *back and forth*: compare to *forward (front) is future*, *back is past*. In the process of metaphorical transfer, information and possible logical inferences from the source region of space are projected onto information and logical inferences about time (Lakoff, Johnson 1999: 145).

2) Ontological metaphors structure abstract entities (events, actions, emotions, ideas) on the basis of human experience connected with physical objects (objects and substances) when the properties inherent in material objects (shape, consistency, size) are projected onto abstract objects (*society is a building*, *emotions is health*) (Lakoff, Johnson 1980: 25-32).

3) Structural metaphors of the field of experience and activities (*time*, *life*) conceptualize due to the overlaid structure of other areas (*money*, *travel*): *time is money*, *life is a journey*.

4) Metaphor "container" represents such meanings as "filling containers" – specific language units.

### **3. Distinction between conceptual metaphors and metonymy**

In considering the problem of interaction between metaphor and metonymy, there are three complementary directions:

1) Metonymy as a conceptual basis of metaphor (the continuum hypothesis of R. Jakobson),

2) Metaphor as a conceptual basis of metonymy (metaphorical scheme of G. Lakoff),

3) Metaphor and metonymy as two separate cognitive processes (B. Warren).

In this paper the third direction – metaphor and metonymy as two independent cognitive processes – is considered as the most logically justified, and it is proved with the use of cognitive-matrix method of research (S.A. Zhabotinskaya).

The difference between metaphor and metonymy is seen in the fact that the metaphor includes a systematic projection of ontological, figurative-schematic and logical structures from the target area to the source area based on the relationship of similarity between the interacting areas, and metonymy includes the relationship of adjacency, expressed by various associative links, and leads to a referential shift.

B. Warren highlights several systemic differences between metaphor and metonymy [Warren 2003: 113-118; 124, 126]:

a) Metaphor is based on a hypothesis (in the metaphor of *life is a journey* *life* appears as if it were a *journey*), whereas in the metonymy hypothetical is absent (for example, in the meaning of the word *kettle* in the sentence *The kettle is boiling*), "non-literal" metonymy is superficial, the nature of associations in it is predictable; in the metaphor the association between the source and the target is arbitrary and unpredictable, because any property of the source and target areas can become the common (hypothetically);

b) Metaphor is necessary either as a rhetorical device or as a means of filling gaps in the dictionary, for metonymy these functions are optional (compare different parts of the country in the meaning of residents);

c) Unlike metaphor, referential metonymy does not occur above the phrasal level;

d) Metaphor can be based on several common properties of the source and target areas simultaneously, which determines the effectiveness of metaphor as an economical means of creating new, associatively rich values; metonymy correlates the source and target areas by means of only one associative link;

e) The nature of associative relationships in itself is various: in metonymy, the association is more likely to occur when the speaker is confronted with source and target are relatively at the same time (contiguity in space/time, causality), whereas in metaphor, the association is based on partial similarity for the catching which the simultaneous presence of the source area and the target area is not necessarily;

Metaphors can give rise to topics whose aspects are developed by the speaker throughout large segments of the text (Kiselyova, Pankratova 2013); individual thematic metaphors in the process of conventionalization can become conceptual (Lakoff, Johnson 1980); metonymy never causes the duration of the developed topics, despite the fact that there are repetitive metonymic models (part instead of whole, capacity instead of content, etc.).

When it comes to metaphor and metonymy division deep processes, G. Lakoff's basic thesis, that

the foundation of thinking activity is metaphor intertwining, building a cognitive map or a concept chain, can be taken... (Lakoff 1988).

Such a chain building is implemented within the idea of proposition schemes that structure conceptual domain area. In a chain the information concentration is situated in nodes, where every node shows the information of certain substance and its place in a chain (Tyler 1995), i.e. is a data base for this substance in a memory, and while information activation is its subject area (domain).

Analyzing characteristics of a subject, specific concepts for this subject can be marked (*apple is a fruit*) as not basic characteristics as well as concepts which are general for definitions of other subjects and phenomena of physical world (shape, taste, color, space and time characteristics) as basic ones. Because of such information division, R. Langacker suggested to split domains into basic and nonbasic, with indirect connections between them (Langacker 2000).

"Basic domains" are defined as domains of space, supporting understanding of different spatial configurations; the domain of time, helping us to understand changes; domains of different senses; domains of

emotions and feelings. Basic domains equipment is not as important as the fact they are minimal, irreducible and inexplicable in other terms. Though there's a connection between basic domains, it's hardly possible to explain a taste in terms of space or time in terms of color. Basic domains form the lowest level in conceptual hierarchy, they have no "background", but they are original, most generalized background for other concepts, they form the conceptual potential amount which is used in different ways by certain concepts (Zhabotinskaya 2009: 63; Trofimova 2018: 328).

“Nonbasic domain” is understood as a background concept or conceptual complex of any difficulty level. From minimal concepts to holistic knowledge systems the difficulty rises. It's important that any non-basic domain has its "background", its base as a context for its very domain conceptual specifics definition.

Now we turn to the methods of differentiation between conceptual metaphor and metonymy and consider an example of using the conceptual interframe network for cognitive matrix analysis of the metonymic expression *agrofirm sowed the seeds of the plant* and the metaphorical expression *he sowed doubt in them*.

At first, in order to do this, we have to build the domain matrix of the literal expression *agricultural workers sowed the seeds of the plant* in the form of an event frame, which includes the following domains: *the worker of the agrofirm* and *the seeds of the plant*.

AGENS-SOMEONE (*worker*) connects with SOMETHING (*agrofirm*) with the help of the possessive frame (the scheme of possessiveness) as part (*worker*) and the whole (*agrofirm*).

The concepts connected by a possessive frame are adjacent and are capable of mutual substitution in the construction of metonymic concepts.

Thereby, the concepts *workers* and *agrofirm* can replace each other with change in the logical level.

When we build a metonymical concept that is based on the event frame, the domain *workers* (part) is obscured and the domain *agrofirm* (the whole) is profiled.

We can see that in the metonymic statement the starting point of the impact of the action frame on the subject frame *seeds* in the possessive scheme part-whole changes its place from *agent worker* to *agrofirm*. We observe the change of the gestalt, but the focus of attention remains within the matrix (*agrofirm* (the whole) substituted *workers* (part)). The action frame in this case unfolds within the event frame.

With this construction of the domain matrix of conceptual metonymy part-whole the phrase *agricultural firm sowed the seeds of the plant* will be verbalized.

To analyze the metaphorical expression *he sowed doubt in them* it is also necessary to construct a domain matrix based on the event frame.

There are two domains in the domain matrix: the domain SOMEONE-AGENTS (*the sower*) and the domain SOMETHING-PATIENT (soil). These domains are interconnected by an action frame (contact scheme) INFLUENCE AT. Action frame takes place in the following schemes: THUS-METHOD (sowing), INSTRUMENT (seeds), AIM (profit), RESULT (crop), which are related domains to domain *the sower*.

The verb *to sow* means *to put seeds in the soil prepared for sowing*. After sowing the seeds, the SOWER waits for the result in the form of crop in order to make a profit. The process of sowing seeds, caring for crops, waiting, harvesting, its realization and profit is accompanied by certain emotions and feelings: the desire to benefit from the actions, the preliminary analysis of what, when and where to put; excitement and doubt, anxiety of the correct choice of material, time and place of sowing; uncertainty in obtaining the final result due to unforeseen circumstances.

Thereby, the gestalt of this event frame is *someone puts something somewhere in favorable conditions for obtaining the necessary result*, which is accompanied by a emotional state of waiting for the result, and uncertainty in obtaining the result, which are the categories of the base domain and which refer us to the sensory level.

It is this gestalt that is the physical basis of the conceptual metaphor and which causes a number of systemic associations according to the context of the use of this metaphor: the domain AGENT (sower) with the domain *agent* (politician), the domain PATIENT (soil) and the domain PATIENT (voter), *the seeds* correspond to the information that is put into the head of the voter, etc.

It is also necessary to examine the abstract concept of DOUBT, expressing the emotional state of a person associated with the basic domain, where the source is our sensory experience. The abstract concept of DOUBT does not have its own pre-conceptual structure, but expresses the emotional state of a person in its pure form. It is the same desire, but doubt, anxiety, uncertainty and dependence on unforeseen circumstances.

A conceptual metaphor is a projection of a more concrete and structured concept on the abstract concept that does not have its own pre-conceptual structure. These concepts belong to different cognitive domains. The verb *sowed* in the event frame refers to the agronomic area (the source area)

connected with sowing seeds, while the target area is an abstract concept of DOUBT relating to the field of sensory.

In order to connect an abstract concept with physical experience, we have to activate the comparative frame, which is formed by interspatial connections of identity and similarity. In the base of a conceptual metaphor lies a scheme of similarity: SOMETHING-referent is SOMETHING-correlate, where a qualitative scheme SUCH is the basis for similarity. In the analyzed conceptual metaphor SOMETHING-correlate is a conceptual matrix, activated in the consciousness with the help of the lexeme SEEDS.

SOMETHING-referent is an abstract concept DOUBT belonging to the basic domain of SENSORY EXPERIENCE. Accordingly, SUCH-referent is SUCH-correlate.

The domain matrix when building this metaphorical scheme expands its borders with the help of action frame due to the domains of RESULT and PURPOSE. Action with superimposed expectation and purpose give sensations that take action beyond the matrix, beyond the physical experience into the space of abstract concepts in the form of gestalt.

On the basis of the connection between the nature of actions and sensory as gestalt, the subject and taxonomic frames are involved into the scheme of comparative connection with one of the abstract concepts of gestalt, bringing under this concept the structuring of a physical event. In this case, the possessive identification scheme disappears in the taxonomic frame (IS), and the comparative relation appears (IS AS IF).

The gestalt does not change, but the focus of attention goes beyond the matrix, increasing the information component and thus changing and strengthening the meaning of the statement.

In this construction of the domain matrix conceptual metaphor is verbalized in the form of statement *he sowed doubt in them*.

When considering the constructions of metaphorical and metonymic statements based on literal ones, the emphasis is placed on the basic action frame, because metonymic and metaphorical characteristics are associated with its certain parameters. These parameters are so different that it becomes obvious: the action frames functioning within the matrices in metonymic and metaphorical processes have different origins.

The next step in our reasoning is the sample analysis of conceptual metaphor and metonymies on the basis of their domain matrices with the use of framing network.

### **Building examples of conceptual metaphor**

1) Ontological metaphor: *No time to lose in the Middle East peace process*.

In this phrase the metaphor is created by the verb *lose*, which in its literal meaning means *to stop having someone or something that you had before* (Mueller 2013: 511).

The interpretation of the verb *to lose* is *to not be able to find someone or something to lose smth. because of missing, lost, etc.*; figurative meaning – to spend pointlessly, waste. The meaning of this verb assumes that the AGENS must be an animate person. To analyze this metaphorical expression, it is necessary to construct a domain matrix of the event-related frame, which can be represented as follows: AGENS (SOMEONE) lost a PATIENT (SOMETHING).

The conceptual matrix of the event-related frame consists of two domains: the AGENT-domain and the THING-domain

These domains are connected by an actional frame (contact scheme) LOSE (lose), which is expanded, assuming such components as the RESULT (stop having) and SO (EVALUATION) - irrevocably.

Subject frame THING also expands one aspect of THIS (QUALITY) is important, unique. This characteristic is present implicitly in the metaphor, because if it is impossible to replace the lost thing with another, then it is unique.

The gestalt is the physical action of LOSING in this event-related frame and the accompanying feeling of irretrievable loss of something unique, in this case the THING.

The abstract concept of TIME as a category is connected with the mental space of the abstract non-material sphere and does not have its own pre-conceptual structure, so it should be expressed through a specific physical concept.

A comparative frame is formed by the interspatial connections of identity, similarity and resemblance to connect the abstract concept of TIME with the physical experience of LOSING THING, where the general gestalt will be the feeling of irretrievable loss of something unique. In comparative frame the qualitative scheme SO (irretrievably) of actional frame and the qualitative scheme SUCH of a subject frame is a unique THING, in this case it is the basis of similarity.

Accordingly, SOMETHING-referent is an abstract concept of TIME, and SOMETHING-correlate is a THING.

The gestalt does not change, but the focus of attention goes beyond the matrix, changing and strengthening the meaning of the statement.

2) Structural metaphor: ***Hunting for a Job? Try the Internet.***

The verb *hunting* creates a metaphor in this phrase (Muller 2013: 423). The verb *hunt* means in direct meaning: *to hunt animals, birds for the*

*purpose of killing or fishing*; and in a figurative meaning – *strive to find, to get something*. The meaning of this verb assumes that the AGENS must be an animate entity (human or animal).

An event-related frame is constructed to build this metaphorical expression: SOMEONE (AGENS-hunter) hunts SOMETHING (PATIENT-animal, bird).

There are two domains in the domain matrix: domain SOMEONE (AGENS-hunter) and domain SOMETHING (PATIENT-animal, bird). Domains are connected by actional frame (contact scheme) – HUNTING (hunt). The actional frame unfolds in two ways: THERE (hunting place) and TOOLS (weapons, hunting skills).

Abstract concept STRIVE TO GET does not have its own conceptual structure, and is a emotional state of man – search, waiting, excitement, etc.

The process of hunting is accompanied by a certain emotional state: search, waiting, excitement, etc. The gestalt is that someone makes the required actions (the hunter lies in ambush and waits for prey – the applicant should publish the application for a work and waits for letters from employers); or hunter looks actively for prey – the applicant views jobs, writes to employers, goes to interviews; the tool in hunting is a gun and hunter skills, and when someone is looking for a job, it is professional skills, interviews, etc.

The gestalt of the event-related frame is the physical basis of this conceptual metaphor and causes a number of systemic associations according to the context of the use of this metaphor: domain AGENS (HUNTER) with domain AGENS (the APPLICANT), domain PATIENT (PREY) and domain PATIENT (JOB); actional frame HUNTING corresponds to the actional frame EAGER TO GET A JOB, etc. Conceptual metaphor is a projection of more concrete and structured concept on abstract concept without its pre-conceptual structure. These concepts belong to different cognitive domains. The verb to HUNT in an event-related frame refers us to the source area, which is associated with hunting animals and birds using hunting skills and a gun, while the target area is an abstract concept to STRIVE TO GET.

Comparative frame is activated to connect the abstract concept of the APPLICANT with the physical experience HUNTER HUNTS. Comparative frame is formed by interspatial connections of identity, similarity and resemblance. The conceptual metaphor is based on the scheme of similarity: SOMETHING-referent is like SOMETHING-correlate, where qualitative scheme SUCH is the basis of similarity.

In this conceptual metaphor SOMETHING-correlate is a HUNTER, SOMETHING-referent is an abstract concept APPLICANT, which belongs to the basic domain of SENSORY EXPERIENCE. Accordingly, SUCH-referent is like SUCH-correlate. On the basis of the nature of actions and sensory as gestalt, the subject and taxonomic frames are involved in the scheme of comparative connection with one of the abstract concepts of gestalt, bringing under this concept the structuration of a physical event. In this case, the possessive identification scheme disappears in the taxonomic frame (IS), and a comparative relation (IS LIKE) appears. The gestalt does not change, but the focus of attention goes beyond the matrix, changing and strengthening the meaning of the statement.

3) Container metaphor: *You know, when you're young and you feel like your nerves are on the outside of your body, and if somebody just brushes your leg you're **in so much pain** because you feel raw.*

The preposition *in* creates a metaphor in this phrase. The meaning of this preposition in this context is an indication of presence – something inside something. This fact shows that the source-area in this metaphor is a certain container and there is an object inside it. Event-related frame is constructed to analyze this metaphorical expression: SOMETHING is inside SOMETHING. It can be represented as a domain matrix which is built by the domain AGENT (SOMETHING-physical object) and the actional frame LOCATES (scheme of state/process). The actional frame unfolds in one aspect THERE into the domain of SOMETHING (CONTAINER), which unfolds in a subject frame in two aspects SO (the way of being – has limits, boundaries) and FUNCTION (to place something). The gestalt of an event-related frame is that SOMETHING is inside SOMETHING that has spatial boundaries. The abstract concept of PAIN does not have its own conceptual structure, so it must be expressed through a specific physical concept.

To form a metaphor on the basis of this event-related frame, a comparative frame is superimposed on it – IS LIKE scheme of similarity – and as the result the feeling of PAIN is like a CONTAINER, and SOMETHING (the human body) is like a physical object, which is inside this CONTAINER. In this case, there is the specificity of the association in the English metaphor – *the human body is inside the pain*, not the pain is inside the body in the Russian meaning. The principle of modeling is the same, regardless of language.

The meaning of this metaphorical expression is that the pain envelops the speaker and the person seems to be inside this pain, and cannot go beyond this physical sensation as from the container (gestalt). So, the

conceptual metaphor of this phrase is that the physical sensation of PAIN-referent is like CONTAINER-correlate, in which the human body is located. The gestalt does not change, but the focus of attention goes beyond the matrix, changing and strengthening the meaning of the statement.

4) Orientational metaphor: *I admired his work with young musicians, **he supported them** so much, and did so much for musical young people.*

The metaphor is created by the verb *supported*, which means *to be a support for something, not let something to fall* (to keep something in a vertical position).

To determine the source domain and the target domain, it is necessary to unfold the support frame in the aspect of *keep in a vertical position (SO) in order not to fall*. Considering the physical basis of this metaphor, *active work* (domain goal) is like *vertical position* (domain source).

Considering the physical basis of event-related frame IS LOCATED VERTICAL POSITION (domain source) is an abstract concept.

To analyze this metaphor, first of all, it is necessary to construct an event-related frame. This network contains two domains that have their own meaning: the AGENTS domain (SOMEONE/SOMETHING providing support) and the PATIENT domain (SOMEONE/SOMETHING receiving support). Domains are connected by an actional frame (contact scheme) to SUPPORT, which unfolds in components of the TARGET (not let to fall) and THE MODE OF ACTION – SO (in a vertical position). The gestalt *keep in a vertical position* activates the physical experience of the horizontal position being characterized by a state of rest, unconsciousness, or death (lack of activity), and the active work being characterized by a vertical position. The concept of *vertical position* and *activity* belong to different cognitive areas.

*Vertical position* is the location in space (the category of the base domain of SPACE); and *activity* refers to the cognitive domain *psychological state that supports physical activity*, is associated with the mental space of the abstract nonmaterial sphere and does not have its pre-conceptual structure. The abstract concept of *activity* is the quality of personality, which appears in the inner readiness for purposeful activity (purposefulness, perseverance, energy, initiative).

Comparative frame is activated to connect the abstract concept of *activity* with the physical experience of *vertical position*. Comparative frame is formed by the interspatial relations of identity, similarity and resemblance. Qualitative scheme SO is the basis of similarity. The comparative frame unfolds against backdrop of a component of actional frame METHOD OF ACTION- SO.

As we see, the metaphorical matrix involves two domains (AGENT and PATIENT), which are connected by an actional frame TO SUPPORT, that unfolds in two aspects: PURPOSE and SO (mode of action). Because we understand the active state as being in a vertical position (spatial orientation), they are connected by a scheme of similarity of the comparative frame.

Unlike other metaphors, where the physical basis of similarity is a physical action or state, the orientation metaphor is based on the physical experience of orientation in space. In this conceptual metaphor SOMETHING-correlate is VERTICAL POSITION, SOMETHING-referent is an abstract concept ACTIVITY. Accordingly, SO-referent (ACTIVITY) is like SO-correlate (VERTICAL POSITION).

The gestalt of the event-related frame is the physical action of *vertical position* that causes a systemic association of activity like vertical position according to the context of the use of this metaphor. The gestalt does not change, but the focus of attention goes beyond the matrix, changes and strengthens the meaning of the statement.

### **Building examples of conceptual metonymy**

1. Metonymy part-whole: *Chekhov will be represented in the dramatic theater* (the author instead of his work).

To create the matrix of this metonymic expression it is necessary to develop it, to construct to syntactically complete sentence: *The director represented the play by Chekhov in the theater*. There are three domains: DIRECTOR, THEATER and CHEKHOV'S PLAY. The domain CHEKHOV is developed by the partitive scheme of the possessive frame and the scheme *class-type* of a taxonomical (identification) frame in the subject frame where the domain CHEKHOV is primary IN RELATION to the secondary domain WORK.

The domain DIRECTOR is connected with the domain WORK by the contact scheme of actional frame and participates in metonymic expression implicitly.

Speaking about the representation of works of A.P. Chekhov in the theater, usually, it is about the play, but not about some other kind of work. So the domain PLAY also is present at this metonymic expression implicitly.

The metonymic cognitive model is the structured concept where between its levels the replacement relations take place. From the matrix of this metonymic expression it is clear that the concept CHEKHOV is structured by the domains WORK and PLAY. Between the domains CHEKHOV and WORK, which are connected by possessive frame, there

are relations of the whole and its parts, which, according to the principle of metonymic cognitive model, are in the relations of conceptual adjacency and can replace each other. So primary domain CHEKHOV replaces the secondary domain WORK (class) as domain PLAY (type).

The actional frame, which connects central domains, is not expanded. The subject frame is expanded by the partitive scheme of the possessive frame. The gestalt WORK as part is replaced by the gestalt CHEKHOV as the whole.

2. Causal metonymy: *Stocks survive – and thrive – a year after **birth** of Fed 'paper' talk.*

We construct an event frame: *Childbirth as an event of the birth of a child.* The metonymic concept is based on this event frame. The concept sphere in this case is the BIRTH of the CHILD, which will be a network of related domains OBSTETRIC INSTITUTION, the medical STAFF, a PARTURIENT WOMAN, the BIRTH PROCESS, the BIRTH of a child, the CHILD (as a result of childbirth), etc.

On the basis of this concept sphere such domains as the process of CHILDBIRTH and the BIRTH of a CHILD that make up the matrix will be profiled. Two domains participate in the conceptual matrix of this event frame: the domain of AGENT (CHILDBIRTH) and the domain of PATIENT (CHILD). These domains are connected by the contact scheme of the action frame, which is deployed by one component RESULT (BIRTH of a CHILD).

Considering the fact that the related domains the PROCESS of CHILDBIRTH and the BIRTH of a CHILD belong to the same conceptual sphere, they are related concepts. The concept of the PROCESS of CHILDBIRTH is seen as a whole (reason), and the concept the BIRTH of a CHILD is seen as part of this process (consequence). Metonymic cognitive model is a structured concept, between the levels of which there are substitution relations.

Thus, the concept of the PROCESS of CHILDBIRTH and the concept of the BIRTH of a CHILD in various language expressions replace each other. When constructing a metonymic concept on the basis of this event frame, CHILDBIRTH as a background (whole) is shaded, and the component of the action frame is profiled – the BIRTH of a CHILD.

3. Detailed metonymy: *Bullets whistled past (method of action instead of the action itself)*

In this phrase, the verb *whistle* creates a conceptual metonymy – one of its meanings is to sweep with a whistle. To analyze this metonymic expression, we construct an event frame: *the bullet flew with a whistle.*

One domain takes part in the event frame: domain SOMETHING-AGENTS (bullet). The action frame expresses an action as a state and is a state/process diagram of an action frame. The action frame is unfolded by one component METHOD-SO (with a whistle). Domain SOMETHING-AGENT (bullet) is not deployed (not structured by the subject frame).

The domain matrix unfolds only the action frame scheme MODE of ACTION (SO) – with a whistle, which gives us an understanding of how the action *fly* is carried out – expresses the fact of the action.

Metonymic cognitive model is a structured concept, between its levels there are substitution relations. Metonymic model is a cognitive reflection of some part of reality on the basis of syntagmatic relations between the whole and its parts (in this case, the whole is the action *fly*, and its part – one of the ways of flight – with a whistle).

When constructing a metonymic concept based on a given event frame, the action frame to FLY as a background (whole) is shaded, and the component of the action frame METHOD-SO (with whistle) is profiled.

Thus, this conceptual metonymy lies in the fact that the component of the action frame METHOD SO (with a whistle) substitutes for the whole action frame (to FLY).

4. Container-content metonymy: *First myth: you should drink at least 8 glasses of water in a day.*

To analyze this metonymic expression, we should expand it into an event frame: *Someone drinks water, which is 8 glasses.*

The domain matrix consists of three domains: domain AGENT (SOMEONE), PATIENT (SOMETHING) – CONTENT (WATER) and SOMETHING as a CONTAINER (GLASS).

The domain PATIENT – the CONTENT (WATER) turns into the subject frame with the help of the inclusive scheme of possessive frame that connects the domain PATIENT – CONTENT (WATER) with the domain SOMETHING as a CONTAINER (GLASS).

The domain SOMEONE – AGENT is connected with the PATIENT – CONTENT (WATER) by the scheme of the contact of the action frame DRANK.

When constructing a metonymic concept based on this event frame, the domain PATIENT (SOMETHING) - CONTENT (WATER) is shaded, and SOMETHING-CONTAINER (GLASS) is profiled. Gestalt WATER is replaced by gestalt GLASS.

## CONCLUSION

As a result of this reasoning we can say, that gestalts depend on the categorical level of the idealized cognitive model. Each level of categorization of the idealized cognitive model is associated with a certain character of gestalt for a particular type of concept. At the level of perception and organization of the prototype, gestalt is a holistic image fixed by the word, combining imagery, sensuality and rational aspects.

The character of gestalt in metonymic processes is based on the ability to replace adjacent (related in the sense of uniformity and pragmatics) images and related associations. Gestalt in metonymic processes is the movement of the point of view within the adjacent concepts.

At the level of metaphor, gestalts form the semantic content of the so-called abstract vocabulary. In metaphor, the use of the gestalts is explained by the physical action and the emotional and psychological characteristics (sensory).

To sum up, it can be concluded that gestalts are associated with categorical levels of the idealized cognitive model. Gestalt is changing, increasingly abstracting from perception to metonymic, and then to metaphorical models of the concept. In the simulation of the domain matrix of the ontological metaphor and the domain matrix of the adverbial metonymy, it is possible to build a domain matrix with a single domain.

## Resources

1. Baranov A.N., Dobrovol'skij D.O. Postulaty kognitivnoj semantiki (Postulates of cognitive semantics). In: *Izvestiya. RAN. Ser. lit. i yaz.* 1997. T. 57 (1). 11-21.

2. *Concise Dictionary of Cognitive Terms* / ed. E.S. Kubryakova. M.: MSU press, 1996.

3. Fauconnier G. Blending as a central process of grammar. In: *Conceptual Structure, Discourse, and Language* / compiled by Adele Goldberg. Stanford: CSLI Publications, 1996. 113-129.

4. Fauconnier G., Turner M. Conceptual Integration Networks. In: *Cognitive Science*. 1998. 22 (2). 133-187.

5. Fauconnier G., Turner M. Compression and global insight. In: *Cognitive linguistics*. 2000. Vol. 11. 283-304.

6. Kovecses Z. The scope of metaphor. In: *Metaphor and Metonymy at the Crossroads. A Cognitive Perspective* / ed. By Antonio Barcelona. Berlin. NY: de Gruyter. 2000. 79-92.

7. Jackendoff R. Sense and Reference in a psychologically based semantics. In: *Talking minds: The study of language in cognitive science*.

London: MIT press, 1984.

8. Kiselyova S.V., Pankratova S.A. I snova o metafore: Kognitivno-semanticheskij analiz (Again about the metaphor)ю SPb: Asterion, 2013.

9. Koch P. Frame and contiguity: On the cognitive bases of metonymy and certain types of word formation. In: *Metonymy in Language and Thought* / Ed. by K.-U. Panther and G. Radden. Amsterdam and Philadelphia: Benjamins, 1999. 139-167.

10. Kövecses Z., Radden G. Metonymy: Developing a cognitive linguistic view. In: *Cognitive Linguistics*. 9 (1). 1998. 37-77.

11. Kovecses Z. The scope of metaphor. In: *Metaphor and Metonymy at the Crossroads. A Cognitive Perspective* / ed. By Antonio Barcelona. Berlin. New York: de Gruyter, 2000. 79-92.

12. Kubryakova E.S, Dem'yankov V. Z., Pankrats YU. G., Luzina L. G. *Kratkij slovar' kognitivnykh terminov* (Brief dictionary of cognitive terms). M.: MGU, 1996.

13. Lakoff G., Johnson M. *Metaphors we live by*. Chicago; London: University Press, 1980.

14. Lakoff G. *Women, fire and dangerous things: What categories reveal about the mind*. Chicago; London, 1987.

15. Lakoff G. Myshlenie v zerkale klassifikatorov (Categories and cognitive models). In: *Novoe v zarubezhnoj lingvistike*. Vyp.10. M., 1988. 350-369.

16. Lakoff G., Turner M. *More than cool reason*. Chicago and London: University Press. 1989.

17. Lakoff G. Johnson M. *Philosophy in the flesh: The embodied mind and its challenge to Western thought*. NY. Basic Books, 1999. 77-78.

18. Langacker R.W. *Foundations of cognitive grammar*. Vol. 2: Descriptive application. Stanford, CA: Stanford University Press, 1991.

19. Langacker R.W. Reference-point constructions. In: *Cognitive Linguistics*. 4. 1993. PP. 1-38.

20. Langacker R.W. *A course in cognitive grammar*. Manuscript. Preliminary draft. San Diego: UCSD, 2000.

21. Myuller K. *Polnyj anglo-russkij russko-anglijskij slovar'* (Full English-Russian, Russian-English Dictionary). M.: EHKSMO, 2013.

22. Paducheva E. V. *Dinamicheskie modeli v semantike leksiki* (Dynamic models in vocabulary semantics). M., 2004.

23. Taylor J. *Linguistic Categorization. Prototypes in Linguistic Theory*. Great Britain: Oxford University Press, 1995.

24. Trofimova N.A. *Ol'faktornaja metafora* (Olfactory metaphor). In: *Kognitivnye issledovanija jazyka*. *Cognitio i communicatio v*

sovremennom global'nom mire / Ed. N. Boldyrev, V. Dem'jankov. 34. M.: MGU im. M.V. Lomonosova, 2018. 328-331.

25. Warren B. An alternative account of the interpretation of referential metonymy and metaphor. In: *Metaphor and metonymy in comparison and contrast* / ed. by Rene Dirven; Ralf Poerings. Berlin; NY: de Gruyter, 2003. 113-130.

26. Zhabotinskaya S.A. Ontologii dlya slovarej tezaurosov: lingvo-kognitivnyj podkhod (Ontologies for thesaurus dictionaries). In: *Filologichny traktati. 2, Vol.1.* 2009. 71-87.