Semantic invariant: its influence on the structure and functioning of English art terms

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Abstract. The article deals with semantic invariant influence on the development of polysemic term structure. Revealing of the semantic invariant in synchronic and diachronic aspects has been analysed. The attention has been paid to semantic motivation study. Art terminological system is considered as integrated structure consisting of interconnected notions. Such a structure creates certain conditions for fulfilling semantic invariant functions.

Keywords: term, sense, semantic invariant, semantic structure, semantic opposition, distinctive semantic component.

Introduction. The problem of a term meaning is one of the most important ones and presents the subject of research and discussions in the modern semasiological science of terminology. The study of any terminological system requires detailed investigation and analysis of its terminological lexis, semantic significance and inner structure. The research of semantic invariant is one of the considerable issues in the modern theoretical linguistics as well as in the structural-systemic linguistic conceptions based on complicated interconnections between the concept of language units' paradigmatic structure and phenomenon of their variability. The problem of semantic unity of a polysemic word is closely connected with modern studies in terminology.

Overview of material on the subject. The issues of semantic structure and terminological systems development have been investigated by L. Hjelmslev, B. Pottier, A. Cruse, R. Jackendoff, Yu. Apresyan and others [11; 14; 8; 12; 1]. The research of invariance and lexis systemic structure is dealt with in the papers of such scientists as A. F. Losev, V.G. Gak, A.A. Ufimtseva, D.N. Shmelyov, S.O. Goursky, T.R. Kyyak, A.S. Dyakov, Z.B. Kudelko [5; 2; 6; 7; 3; 4].

C. Fillmore, R. Langacker , A. Wierzbicka, C. Goddard are studying semantic structure and its underlying invariant processes from the point of view of cognitive conceptual models [9: 13; 10]. This branch of research focuses on mental basis of semantic processes, describing and observing inner cognitive structure and dynamics of such processes.

S.O. Goursky claimed that common semantic component – invariant "remains relatively invariable in the process of consecutive correlation between the same word-sign and properly different notions… As an intralinguistic element of a language plan, the semantic invariant is the proper meaning of a word and a component of lexical-semantic language system while being observed in the terms of semantic distinctive features" [3, p. 10].

The aim. The present study is aimed at investigating a term evolution and its semantic connections with an invariant meaning of a term and, also, separating a common semantic component – invariant on the research basis of art terms. Moreover, our goal is to study semantic invariant's influence on the development of a polysemic word-term meaning structure and on term formation general processes.

Materials and methods. To start with, it is necessary to distinguish between paradigmatic links and semantic-categorical derivation (affixal, inflexional, etc.). Semantic derivation is more complicated not only regarding the form, but also the number of "stages", which separate initial and derivative forms. Such processes are to be observed while revealing a common semantic component – invariant. This derivation type is particularly important as it permits to cover as many senses of words-terms as possible and not only within a paradigmatic range. In addition, it becomes possible to clarify underlying causes and ways of stem transformations, which lead to creation not only new senses (of the same word-term), but also new terms.

It has been observed that in some cases while word formation the derivative stem is more complicated than the previous or initial ones. Besides, the complication is noticed in the morphemic and semantic forms at the same time. The task-oriented structural analysis has been carried out to reveal a semantic invariant. Also, during such analysis the both synchronic and diachronic aspects have been taken into account.

Carrying out the research, we apply semantic analysis of lexicographic definitions and extralinguistic information as well as componential analysis and method of semantic oppositions. Furthermore, S.O. Goursky's method «meaning – sense", the theoretical and methodological approaches of theory of semantic domain and contextual analysis have been used while investigating the issue.

Results and discussion. To investigate semantic development of an art term and how it is influenced by semantic invariant we have chosen the terms *palette* and *stain* as frequently used ones. Synchronic aspect of a term development makes it possible to trace existent interconnection between the senses within lexeme structure, and also to investigate functioning of each sense in a certain semantic domain. But to cover more semantic factors, which have influenced the formation of semantic invariant and lexeme structures, we have also taken into consideration diachronic aspect. Thus, combining both aspects of investigation is necessary.

We have analyzed the definitions of the term *palette* in lexicographic sources[16, p.1023;18, p.2076] : *palette*: 1) a thin (oval) board or slab, usually with a hole for the thumb, on which an artist lays and mixes colours; b) *transf.* the range of colours used by a particular artist or in a particular picture, or in which a particular product is available ; c) the range or variety of tonal or instrumental colour in a musical piece, composer`s work, etc.; the verbal range of a writer etc.; 2) *Zool.* A disclike structure; *spec.* a) an accessory valve in some boring mollusks ; b) *Entomol.* A flat expanded part on the legs of some insects

(esp. aquatic beetles) ; 3) a device used by the banker in certain card-games to move cards and money.

The noun *pale*, which forms stem morpheme of the term *palette*, originates from Latin *pālus* (wooden pole, post), which is the descendant of the base **pag* (fix). English *palisade* comes from **pālicea*, a Vulgar Latin derivative of *pālus*, and Latin *pāla* (which meant a peel or a spade with a flat blade to put bread into the oven) produced English *palette* (which is a diminutive from *pāla*). Initially this term meant a flat blade used for spreading things, then the term was used to define a flat slab for mixing paints.

Having applied combination of synchronic and diachronic aspects, semantic oppositions, correlated and relational links, we have revealed distinctive semantic components, which are comprised into semantic invariant of the term *palette*. Using a shared element "*action, quality*" as the ground for comparison in the semantic oppositions, we have revealed the explicit distinctive semantic component "*certain hardness, inflexibility; a bearing, a pier, a bulwark*". This component is morphologically fixed in the root morpheme (the semantic oppositions – *palette* :: pigment, *palette* :: canvas). Using a shared feature "*an object having above-mentioned properties (certain hardness, inflexibility), an object able to be a pier, a bulwark*" as the ground for comparison in the semantic oppositions, we have revealed another explicit distinctive semantic component "*a stick or a cane of any form, a slab*" (the semantic oppositions – *palette* :: mastic; *palette* :: plaster of Paris). The next distinctive semantic component might be revealed due to the oppositions with a shared feature "*the use of above-mentioned object*". This distinctive component is *"the form allowing to use an object in above-mentioned way, mainly a flat form"* (the semantic oppositions – *palette* :: brush, *palette* :: chisel). This component is implicit.

We have distinguished both "simple" and "complicated" metaphors in the development of the term senses. We define the "simple" metaphor as direct analogy with the form – a flat stick, a small plank, which can be used for supporting, keeping anything on (for instance, paints), and also for direct use of its flat form (for mixing, spreading anything) – " *Le Gentil, comte de Paroy… described her apartment and its contents in his memoirs: an easel with a painting begun, a box of oil paints, … a drawing table supporting a small stand with a miniature, an English box, an ivory palette and brushes…*" [22]. Accordingly, the "complicated" metaphor is next, higher level of metaphor, which is nominally closely connected with metonymy (when semantic feature – the content of this flat small plank (paints)– is actualized) – "*Conquista adopted this tradition, although here, the artist interpreted the color scheme with a softer palette that relies on tans, pinks, and whites*" [21].

Structured in a certain way, distinctive components form a peculiar model within the semantic invariant. This model is able to function on any base, in any sphere, i.e. potentially in any semantic (as well as terminological) field. This ability allows the sense "*a bearing, a pier, a bulwark*" to obtain the sense of a stick or a plank mainly flat, which might be used in many different spheres: a surgeon's flat tool used for putting ointment; a spade; a flat mollusc's valve; a flat plank for keeping and mixing paints and then anything connected with a great richness of paints, which are gathered and create a real source for artistic variety. Hence originate the metaphorical senses, which comprise symbolism of any profoundness and intensity (rich, wide *palette*; restricted *palette*; bright *palette*; warm, cold *palette*; Rembrandt`s magic *palette*) – """ *primitivism", a style defined by a vibrant palette that enhanced Haiti's tropical colors*" [20]; "*she aims to keep a brilliant palette while building her paint to truly luxuriant depths.*" [23]. Semantic invariant enables a term to transfer into new terminological domains – music and literature («*Schneider has always favored an impressionistic palette. She likes watercolor tones and pastels. She orchestrates with unconventional combinations of instruments – a trumpet and an electric guitar in unison, a muted trombone and a baritone saxophone combined to sound like an English horn*» [19]). These terminological senses are characterized by symbolism of a high level of intensity, too. Such influence of the semantic invariant explains the emergence of a term in one more semantic field "feelings and senses" (*palette* of flavours).

Regarding the term *stain*, in the lexicographic sources a noun *stain* has more than five senses, while a verb *stain* has more then six [16; 17; 18]. For our analysis we have combined synchronic and diachronic aspects. Nowadays *stain* is the diminutive from *distain*, borrowed from Old French *desteindre* (the stem *destein-* was used referring to a dead or somebody/something that lost the colour). This stem combines Latin prefix *dis-* (away) with a word *tingere* (to dye). The root *tinge* comprises two senses: the main one – "*to soak, to wet*", the derivative one – "*process of dyeing or some dye*" (which comes from the process of soaking in thin paint or dye). Thus, both parts of the stem – the root and the prefix – influenced the term development. So, we conclude that despite the lost of the prefix in a certain historical period, the invariant meaning of this prefix remained in the term semantic structure afterwards. This inference explains existence of two opposite senses: "*to ornament with coloured designs or patterns; depict in colour*" and "*to discolour or damage with spots or streaks*".

For the purpose of explaining the term semantic structure, we have revealed the structure of semantic invariant. Having distinguished the first shared feature "*type of fulfilling a process*" (which is a categorical feature) as the ground for comparison in the semantic oppositions, we have revealed the distinctive semantic component "*a process of dyeing, soaking and the result of such a process*" (the semantic oppositions – *stain* :: air (dry), *stain* :: aerate (ventilate)). Next shared feature is "*aim, goal of a process*". Having used it as the ground for comparison in the semantic oppositions, we have revealed next distinctive semantic component – "*changing of a colour or a state*".

When material things (particularly, some paint) are the base for the opposition, semantic invariant determines the emergence of terminological senses (in painting, etc.) – *"In the next phase, she begins a monochromatic underpainting to set up the value structure of the composition using a slightly darker variation of the stain"* [24]. The new terms are created in the same way – *stained glass*, *stain painting*. When the base for the opposition are the feelings, the senses are figurative – "*a blemish on somebody's character or reputation*".

Conclusions. Having conducted the research on semantic structure of a polysemic term and its invariant, we make the following conclusions. The semantic invariant of a term has a complex hierarchical structure, which comprises both explicit and implicit distinctive semantic components. The invariant structure influences drastically term evolution and causes a great variety of connections between terminological and common lexis. Due to this fact, transterminological processes are possible.

Functional peculiarities of semantic invariant structure allow to explain and predict the ways the terms are used in various terminological systems. The results of the present semantic analysis can be applied for investigation different cases of semantic derivation, especially those which are difficult to explain. Therefore, changes within a certain term structure and semantic peculiarities of different terminological senses can be explained. We consider that such approach facilitates revealing new (even unexpected) etymologies and explaining disputable or vague semantic phenomena.

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Abstract. The present paper pays special attention to revealing the semantic invariant of a term as an essential component of term-formation in the art terminological system. Functioning of the semantic invariant and its significance in the polysemic term structure have also been investigated in the article. Systemic approach as well as synthesis of methods have been applied to the study of terminological lexis, which makes it possible to distinguish main semantic characteristics and predict further development of the term structures.

Keywords: term, sense, semantic invariant, semantic structure, semantic opposition, distinctive semantic component.