

WORD-FORMATION IN THE CONTEXT OF MULTI-DISCIPLINARY COGNITIVE PARADIGM

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Abstract. Traditional structure-oriented analysis of derivatives does not comply with the requirements of the new cognitive paradigm of linguistic knowledge, which incorporates knowledge gained within different sciences. Word-formation serves the explication of human cognitive potential, which originates from linguistic personality's individual and collective experience.

The analysis of *-er*, *-ee*, *-ant* / *-ent* and *-ist* revealed that the considered affixes which are characterized by close semantic links can objectify cognitive structures with similar meanings although the derivatives with these suffixes are characterized by a wide degree of polysemy. Thus, any concrete derivational mechanism objectifies the act of thought production in a verbal-sign form. Specificity and regularity of major operations with knowledge structures in mental space of a linguistic personality are represented in the basic derivational mechanisms which take place in a lexico-semantic subsystem of this or that language.

The results of this research indicate the inseparable connection of derivational processes with the idea of a language as a mental phenomenon, focusing on organizing, processing and transferring information. Cognitive word-formation analysis of derivatives can represent the basis for our knowledge organization at the junction of «language» and «thought».

Keywords: word-formation, cognitive paradigm, derivatives, cognition, conceptual integrity

During the last decades the study of multi-aspect correlations between language and thinking has intensified new trends and received a lot of attention of different specialists. The existence of close ties between human thinking and language / speech was known a long time ago. Language has remained the brightest identifying characteristic of ethnos at all times and for this reason ethnic groups are often called *lingua-cultural* communities. In the 6th century BC Pythagoras, a philosopher from Ancient Greece, believed that if we want to know morals and

manners of some ethnic communities, we should learn their language.

Since the end of the previous century within the framework of the scientific paradigm change, humanitarian (and, in particular, linguistic) knowledge has experienced the shift from a dominating system-structural and static paradigm to the anthropocentric, discourse, cognitive and dynamic oriented one. At this updated level of scientific interests new sciences and their branches, new interdisciplinary relations appear: ethnopsychology, psycholinguistics, cognitive psychology, sociolinguistics, cognitive linguistics and its various directions, ethno linguistics, onto linguistics, etc. The interpenetration of different disciplines (such as linguistics, philosophy, psychology, culture study) and the tendency to methodological pluralism can be viewed as the major characteristics of the linguistic science at the end of the 20th and the beginning of the 21st century. As early as in the middle of the 19th century Friedrich Engels predicted that the most outstanding scientific discoveries would take place at the junction of sciences.

Thus, quite naturally there appears an opinion that the role of a language in a human society is to serve “cognition” which is understood both as scientific and everyday knowledge of the world realized in the processes of its conceptualization and categorization. Consequently, the basis of cognitive approach to the analysis of language forms consists in correlating them with various knowledge formats, which objectify the given forms. We share the opinion according to which, the importance of language structures is in

their ability to realize both vast structures of knowledge and their fragments (frames, scripts, concepts and categories of various levels, slots and terminals of frame structures), in the most accessible forms of verbal statements, which can be thoroughly examined from various cognitive views [2].

It is known that the language word stock is enriched, basically, in two ways: by word-formation (by means of units of all language levels - phonetic, morphemic, lexico-semantic and syntactic) and by loaning. Sometimes word making process incorporates various ways simultaneously. Such phenomena are referred to as complex ways of nomination. The above-mentioned ways can be referred to as «nuclear» word-stock enrichment ways, besides; there also exist "peripheral" ones: creation of neologisms, lexicalization, phraseologization / dephraseologization, etc.

So far cognitive linguistics has been intensively exploited while examining the questions of grammar, semantics, syntax and pragmatics. As for word-formation, it has not so widely been made use of yet, although word-formation processes are connected with all language levels: morphology, phonology, syntax, vocabulary. The recent research shows that word-formation as well as other linguistic phenomena reflects the knowledge and experience of the cultural life of both an individual and community and contributes to the formation of the linguistic picture of the world. Within the cognitive paradigm derivation in its broad sense allows to consider a lot of language processes from the positions of "the human factor" and linguistic personality's "cognitive activity" (perception, use, storage and production of information). This process becomes even more justified if we take into consideration the interdisciplinary character of modern science.

The traditional structure-oriented analysis of word-formation structures does not any longer comply with the

requirements of a new human-oriented approach, which represents word-formation within the limits of a triad «thinking - language - culture», whose components are interconnected and interdependent, due to the cognizing activity of a linguistic personality possessing linguistic consciousness. Word-formation serves the explication of human cognitive experience, expanding their linguistic consciousness. The notion of language consciousness is narrower than cognitive consciousness. Word-formation activity takes part in the redistribution of language consciousness units and cognitive consciousness ones, not only verbalizing nonverbal elements of the cognitive semantic space, but also transforming and generalizing cognitions of a verbal level [1].

Even in ancient philosophy we can trace the roots of cognitive nature of derivational processes. Philosophers Plato, Heraclitus and others, while reasoning about "logos" and "onoma", believed that a word must be created and made use of in a proper way; otherwise the order in a society can be broken. A new word appears not just all of a sudden, but it reflects the multi-aspect correlation between the objects of the reality and a language sign. This understanding gives rise to the belief, that cognitive human activity is not confined just to the use of already existing lexical units, but also includes the ability to form new ones, which can be regarded as an inseparable part of world cognition. Moreover it is easier to trace some cognitive processes in a new derivative than in a unit of a well-established vocabulary. A derivative describes its reference object more vividly than a non-derivative word.

In modern linguistics various classes of words are studied not «for practical purposes (that is, to provide us with a tool of description), but also in an attempt to explain how it is that speakers 'know' how to build new words and how to combine words into grammatical

sentences. In other words, many linguists think that these word classes have psychological reality» [3].

Within the framework of the new anthropocentric paradigm a person is treated as an active creator of a language, and new words represent the result of this creative activity. Word-production is a multi-aspect process which is aimed at filling in the gaps which appear due to different reasons:

- appearance of new cognitions (often connected with the science and technology development and term formation needs) (*autostereographics, blogosphere*),
- economy and unification of language means (abbreviation, word-compounding, conversion, blending, contamination, borrowings, etc.),
- emotional expression (borrowings and occasional words),
- language fashion (borrowings),
- speech inaccuracy.

All these reasons stimulate the creating of new words including the process of speech and thought production activity. While creating a new word, the speaker spontaneously refers it to some definite part of speech, uses it in a required grammar form, correlating it with surrounding words. This can support our hypothesis that specificity and regularity of operations with knowledge structures in mental space of a linguistic personality are represented in the basic derivational mechanisms which take place in a lexico-semantic subsystem of any language.

Any concrete derivational mechanism objectifies the act of thought production in a verbal-sign form, representing it in the form of binary structure whose elements are connected by predicative relations. Within the word morphemic structure a root can be considered as a theme, and an affix - as a rheme. The similar relations can be found within the derivationally determined lexeme meaning, where typical word-formation meaning is a theme, and

individual word-formation meaning represents a rheme.

Semantics of a root morpheme represents some cognitive background [4], which is specified and structured by means of derivational affixes. It is important, that semantics of affixes also represents a certain component of the linguistic personality conceptual sphere, but it is completely different from the root semantics. From the cognitive point of view a root morpheme should be treated as a *macro-verbalizer* of conceptual information, making the content of this or that fragment of a linguistic personality conceptual sphere. Therefore in this case it is possible to speak about the developing of predicative, semi-predicative, etc. relations among certain elements of sense, concepts and conceptual spheres, and only then these relations become explicit in a discourse by language means.

We have analyzed a number of suffixal derivatives (nouns and adjectives), including the following word-formation suffixes *-er, -ee, -ant /-ent* and *-ist*, which are characterized by close semantic links. We'll consider possible variants of classification of the derivatives, containing the above-mentioned suffixes. These lexemes are attributed various semantic classifications, which can be represented as a set of categorical elements of the meaning (semes).

The formants under analysis are combined with verbal, nominative and (much less often) adjectival stems:

- er - stem type V, less often N;
- ee -stem type V, less often N;
- ist – stem type N, less often Adj.;
- ant /-ent – stem type V.

It is possible to classify the corpus of the analyzed derivatives (more than 2600 units) on the basis of general categorical elements of both lexical and grammatical meanings. These meanings were revealed while analyzing their definitions in dictionaries (5, 6, 7, 8).

The results of the classification are presented in tables 1-4.

Table 1

Suffix-er

General categorical seme	Examples of derivatives
<i>Agent</i>	<i>Adviser, thinker, walker, writer</i>
<i>Instrument</i>	<i>Cutter, dryer, mower, opener, pager, printer</i>
<i>Stimulus</i>	<i>Pleaser, killer, page-turner</i>
<i>Experiencer</i>	<i>Hearer, listener</i>
<i>Patient</i>	<i>Fryer, keeper, looker, sinker, loaner</i>
<i>Location</i>	<i>Diner</i>
<i>Measure</i>	<i>Fiver</i>

Table 2

Suffix – ee

(Here it is necessary to mention that the major part of the selected units – more than 70 % - are represented by specialized vocabulary)

General categorical seme	Examples of derivatives
<i>Patient</i>	<i>Employee, deportee, nominee</i>
<i>Agent</i>	<i>Attendee, devotee, escapee, standee</i>
<i>Object</i>	<i>Addressee, alienee, dedicatee, offeree</i>
<i>Absence</i>	<i>Amputee</i>

Table 3

Suffixes –ant / -ent

General categorical seme	Examples of derivatives
<i>Agent</i>	<i>Accountant, claimant, servant</i>
<i>Instrument</i>	<i>Adulterant, evacuant, irritant</i>
<i>Experiencer</i>	<i>Dependent, detestant, discernant</i>
<i>Patient</i>	<i>Confidant, insurant, descendant</i>

Table 4

Suffix –ist

General categorical seme	Examples of derivatives
<i>Denominal person nouns</i>	<i>Guitarist, Marxist</i>
<i>Deadjectival person nouns</i>	<i>Purist, fatalist</i>

As the above-mentioned classifications show, the analyzed derivatives demonstrate a wide degree of polysemy, but at the same time it is possible to single out some cases in which general categorical elements of meaning, typical of different derivatives, coincide. It is obvious, for example, that by means of suffix *-ee*, the most frequent and, hence, productive model is: formation of nouns in the semantic case of *patient* (e.g. nominee - a person who is nominated for some office

or duty; a confidant – a person entrusted with knowledge of one's private affairs (orig. esp. one's love affairs) or thoughts). The rest of the affixes from this classification are used to form the nouns with *agent* - semantics, or represent the objects, closely connected with the subjects of the actions and / or processes (tools, stimulus, etc.). At the same time, the significant number of derivatives in *-ee* are labeled with *agent* - semantics (e.g. escapee – a person who has escaped;

retiree - a person who has retired), and many nouns in *-er*, *-ant / -ent* and *-ist* show the ability to form both the lexemes acting in a case of a *patient*, and in other, "object-oriented", passive semantic roles (for example, insurant – the person to whom an insurance policy is issued). Thus, we can observe here a kind of a semantic paradox which is possible to resolve only on conditions that the considered affixes objectify the cognitive structures with similar meanings. We have tried to interpret the derivational schemes under study in terms of cognitive structures, represented by them.

First of all it is worth mentioning, that the affixes under investigation are used for the formation of nouns from the stems of other parts of speech, mainly from verb stems. Thus, we can see the following transformation of grammatical semantics of an initial basis: action → subject. It is really so *prima facie*, as the suffixes *-ee*, *-er*, *-ant / -ent* and *-ist* form nouns. But if we turn to the hypothesis of conceptual blending in relation to the derivational mechanisms under study, we observe the interaction of two concepts of a high degree of abstraction - concepts ACTION and OBJECT in the semantics of *-ee*, *-er*, *-ant / -ent* and *-ist* nouns.

The analysis shows, that while interacting the content of one conceptual structure does not supplant the content of the concept-receiver. This fact proves to be true according to the results of the definition analysis of the noun-derivatives under study. Thus, there is an explicitly objectified ACTION seme in the semantics of 94% derivatives. Consequently, ACTION semantics is not completely transformed to the SUBJECT semantics. Let's consider the examples:

- *employee* – a person who works for another in return for wages [8];
- *escapee* – someone who has escaped [8];
- *opener* – 1) a person or thing that opens something, 2) a device for opening tins or bottles [8];

- *thriller* – an exciting story or film, especially one involving crime [8];
- *claimant* – a person who makes a claim, especially in law [8];
- *guitarist* – someone who plays a stringed musical instrument with his fingers or a plectrum [8];
- *purist* – a stickler for enforcing correctness, especially in language [8].

The interaction of the concepts ACTION and OBJECT results in the complex conceptual integrity in which concept OBJECT prevails, but the content of the concept-source ACTION is also traced.

Processes of structural and semantic derivation in language represent the reflection of conventional models of the interaction of a linguistic personality's conceptual sphere structures. The interaction of conceptual structures results in the form of a blending, which integrates two (for this research) or more conceptual fragments. Separate word-formation elements can objectify various areas of the resultant-concept, which causes semantic distinctions of lexemes-derivatives while the content unification of a resultant-concept makes it possible to unite the lexemes formed by different word-formation models.

A new derivative represents a complex structural-semantic unit, each component of which represents some concept. Consequently, word derivational structure can help to reveal and describe connections and relations between concepts, which originate from linguistic personality's individual and collective experience.

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