

UDC 811.112.2'374.2:330

*National Research Tomsk Polytechnic
University, TPU, Cand. of Pedagog. Sc.,
Associated Professor of the
Department of Methods of Teaching
Foreign Languages
e-mail: ovtchom@rambler.ru*

O.M. Ovchinnikova

**CREOLIZED TEXT IN ECONOMIC DICTIONARIES
OF THE GERMAN LANGUAGE:
FUNCTIONAL-AND-SEMANTIC ASPECT**

The methods of the lexicographic interpretation of scientific concepts in economic terminology dictionaries of the German language are considered with an abstract-and- schematic and paragraphemed means of creolized text. Along with the analysis of the range of the means of nonverbal communication and their external organization, special attention is given to the functions which perform the similar means in a dictionary entry of polycode character.

Key-words: glossary of Terminology, the German language, lexicographic article, creolized text, schematic images, logical correlation.

Obtaining knowledge in a certain academic field means mastering special terminology of this field. A dictionary is a necessary tool for grasping the terminological conceptual framework in order to achieve the precise interpretation of terms. The function of term recording and definition is fulfilled by terminological dictionaries. The terminographic field of research is widely presented in the works of Russian and international lexicographers – Yu.D. Apresyan, V.V. Vinogradov, Yu.N. Karaulov, S.I. Ozhegov, Yu.S. Sorokin, E.A. Sternin, A.A. Ufimtseva, H. Bergeholtz, S. Tarp et alia.

Nevertheless, some aspects of lexicographic interpretation of scientific terminology are still little-studied. Such aspects include the use of non-verbal sign codes when revealing the matter of scientific notions in terminographic dictionaries.

The introduction of supplementary comments into a lexicographic entry in the form of diagrams, schemes, analytical tables, and charts comes from the need in elimination, “cumulativeness”, compression of information when interpreting complex scientific notions. E. Bates highlights the expediency of using compressed information by saying that extracts of compressed information are easier to manipulate mentally than everything we know about a phenomenon or event. The function of such extracts, according to the author, consists in that “...representation of an object in the mind in the form of a simplified mental token with the whole scope of knowledge behind it provides us with some inner referents without presentation support by an objective referent” [1].

The rapid growth of the volume of scientific knowledge requires constant arrangement of terminological systems, clear lexicographic definition of terms, including by means of illustrative reflection of their notional reference by means of sign codes of non-verbal semiotic systems. It is noteworthy that, just as A.G. Sokolova, we understand the terms “lexicographic definition” and “dictionary interpretation” as the meaning of the word being interpreted in a dictionary entry and the terms “description” and “definition”, as semantization methods [2]. The theory of this article is based on the research in linguistic semantics by I.M. Kobozeva [3], in terminological ideography by V.D. Tabanakova [4], in paragramemics by I.V. Vashunina

[5] as well as the works in the field of text linguistics by E.E. Anisimova [6].

As it has been mentioned above, the problem of using non-verbal means of scientific terminology semantization in specialized dictionaries has been underinvestigated heretofore. Illustrating such dictionaries is most often interpreted in the aspect of graphic design of a dictionary entry, whereas the illustrative materials are mostly considered as a function of expressive graphics together with topographemed (text segmentation) and supragraphemed means (font highlighting, color layout, etc.).

The purpose of this article is to analyze the methods of lexicographic interpretation of scientific concepts in economic terminology dictionaries of the German language on the basis of semiotically complicated creolized text considered by E.F. Tarasov as a text whose structure consists of two non-homogenous parts: verbal (linguistic) and non-verbal (belonging to other semiotic systems than a natural language) [7].

The analysis of dictionary entries reflecting the thematic field of economic knowledge is based on the two authentic German glossaries:

1. Lexikon der Betriebswirtschaftslehre / von Klaus Olfert und Horst-Joachim Rahn. – Ludwigshafen : Kiehl, 1997 (Kompendium der praktischen Betriebswirtschaft) (contains 1000 terms);
2. SCHÜLER DUDEN Die Wirtschaft/ hrsg. von Meyers Lexikonredaktion unter der Leitung von Werner Digel. Bearb.von Gerd Sackmann und Hans Weber, – Mannheim; Leipzig; Wien; Zürich: Duden-Verlag, 1992. (contains 2500 terms).

The dictionaries presented are reference glossaries of the same type from the typological viewpoint. These are monolingual alphabetic glossaries compiled under the semasiological description principle. They contain topic sections devoted to business economics (Lexikon der Betriebswirtschaftslehre), management, marketing, investment, economic and social politics (Schülerduden. Die Wirtschaft). The learner's dictionary Schülerduden is destined for pupils and beginner students and implies the target group to have a certain minimum of knowledge in order to meet their usage interest. This conditions a more intelligible level of lexicographic definitions in this dictionary vs. a reference dictionary intended for students of economics and practical specialists in the field of business economics (Lexikon der Betriebswirtschaftslehre).

It was discovered when studying the lexicographic term definitions that of the 4 universal types of dictionary definitions (as per the classification by G.N. Sklyarevskaya [8] – denotative (ostensive, real, descriptive), logical (genus/species), equivalent (linguistic, synonymous), referential (functional, correlative), the above mentioned sources include three main types: descriptive, referential and genus/species. Of these term definitions, genus/species ones hold a special place, as they correlate the terms with wider generic concepts. Let us consider the definition of the term *Arbeitslohn* (salary) given in the dictionary Lexikon der Betriebswirtschaftslehre: *Der Arbeitslohn ist die von einem Arbeitgeber bezahlte Vergütung für die von einem Arbeitnehmer erbrachte Arbeitsleistung*. In the example given, the word *Arbeitslohn* is related to a wider generic concept *Vergütung* (reward, remuneration), which starts the descriptive definition and becomes its part accompanied by the list of additional attributes of the term defined (*von einem Arbeitgeber bezahlt, für die von einem Arbeitnehmer erbrachte Arbeitsleistung*).

The analysis of German economic reference dictionaries testifies to a clear and hierarchically arranged way of presenting the semantic components of the concepts interpreted. Such arrangement is achieved due to the support of lexicographic definitions by logical and schematic images facilitating more compressed and illustrative term description.

The schematic images supplementing the verbal term definition reflect the various-type logical dependencies and are used to support the logical (genus/species) definitions of dictionary entries.

As per I.N. Kuznetsov's definition, scheme is an image using conventional signs (not to scale) to transfer the main idea of a certain device, object or process and to show the interrelation of their key elements [9]. Any scheme is a product of abstracting and is aimed at showing the most important and principal about the object under study. The economic reference books contain schemes visualizing **hypo/hyperonymic correlations**, in which the word being defined and meaning a generic concept is connected with the words reflecting the particular subdivisions of this notion. Let us illustrate one of the varieties of genus/species correlation on the basis of a dictionary entry of the term *Arbeitslohn*. In this entry, the descriptive definition of this term is supplemented by a scheme, in which forms of salary are hyponyms in relation to the concept being interpreted and are simultaneously represented as monostratal co-hyponyms in relation to each other (*Zeitlohn, Akkordlohn, Prämienlohn, sonstiger Arbeitslohn*).

The definitions of some terms are supplemented by complex multi-level schemes reflecting the **genus/species correlations** based on endocentric series, where each successive word of the series is a hyponym to the previous one and a hyperonym to the following one. E.g., a dictionary entry to the term combination "*Steuer, Arten*" (tax types) is supplemented by a three-level scheme, whose first level shows the term *Steuer* being defined and the second one, the concepts reflecting the nature of fiscal charges: *Direkte/ Indirekte Steuern* (direct and indirect taxes). At the third level, direct taxes (*Direkte Steuern*) are subdivided into two groups including personal taxes: *Personensteuern* and their varieties: *Einkommensteuer, Körperschaftsteuer, Vermögensteuer, Erbschaftsteuer, Kirchensteuer* and property taxes: *Objektsteuern* with the list of their varieties: *Gewerbesteuer, Grundsteuer*, whereas indirect taxes are exemplified by commercial operations taxes: *Verkehrssteuern: Umsatzsteuer, Versicherungssteuer, Grunderwerbsteuer* and excise duties: *Verbrauchssteuern: Schaumweinsteuer, Biersteuer, Kaffeesteuer, Tabaksteuer, Mineralölsteuer*. Thus, the usage of a scheme as a supplementary lexicographic means of term semantization is based on the logical-conceptual analysis of a corresponding term with a set of attributes singled out for each of the notions being semantized.

Another variety of schemes presented in specialized economic dictionaries reflects the terms being defined on the basis of correlation of semantic derivation. These correlations include relations of various types, such as **action – action tool**, e.g., the dictionary entry of the term *Marktforschung* (market research) includes a scheme that shows the key instruments for market research implementation: *Marktanalyse, Marktbeobachtung, Marktprognose* (analysis, observation and market forecast). The **action – mode of action** relations are visualized on the same scheme by listing the methods of market research, such as: *Befragung, Beobachtung, Experiment* (survey, observation and experiment).

We can see a scheme to convey **temporal relation** in a lexicographic entry for the term *Materiallagerung* (raw materials storage). It shows the chronological sequence of material flow movement in a warehouse with the help of a scheme by placing the names of separate stages in accordance with the real storing process: *Materiallagerung: Materialeingang → Qualitätsprüfung → Rechnungsprüfung → Materialabgang* (arrival, quality check, examination of accounts, departure).

The above mentioned correlations are common for the most various semantic fields. The schemes within dictionary entries of the reference books under research also show specific correlations typical of semantic fields in the economic sphere of knowledge. E.g., in contextual definitions the logical structure that is not expressed linguistically, the concept meanings are revealed using schematic images visualizing the "control-subordination" relations.

For the term *Spartenorganisation* (divisional control structure), these relations are expressed by an organigram. It shows the morphological structure of a firm with the "**control-**

subordination” administrative connection of elements, which is characterized by clear split of responsibilities within the framework of separate products and functions. The graphical representation of this scheme includes the use of standard programming elements: rectangles, circles, squares interconnected with lines. Serving for the designation of structures and actions, these graphics makes the text of a dictionary entry significantly easier to perceive.

Contrastive and diagnostic relations when interpreting the term *Spartenorganisation* (divisional control structure) are explicated by means of a supplementary table with two columns showing bullet lists of strengths and weaknesses of the divisional structural organization of enterprise units.

The contrastive characteristics of the term combination *größenbezogene Unternehmen* (enterprise size) is also conveyed with the help of a table, which is a universal means of system data classification. All the information consisting of digital and textual material is placed in lines and columns of the cells. The upper line is grouped into five headline sections: 1. *Unternehmen mit ... Beschäftigten*, 2. *Zahl der Unternehmen*, 3. *Anteil in %*, 4. *Beschäftigte*, 5. *Anteil in %* (1. Enterprises with ... to ... employees; 2. Number of enterprises; 3. Share of enterprises, in %; 4. Number of employees at the enterprise; 5. Share of employees, in %). The subsequent lines divided into cells by columns make the body of a table and are a means of arranging this document’s contents. The arrangement logic of this table places the logical subject (five sections mentioned above) in the box heading and the logical matter characterizing the subject (i.e. digital data), in the body of the table. Such information presentation with the statistics involved allowed arranging and contrasting the data, which helps readers obtain detailed data on the quantity of large, medium-sized and small-scale enterprises in Germany, their share in percentage and the number of their employees.

Another means of contrastive characteristics when interpreting economic terms is bar charts (histograms) reflecting the **quantitative comparisons**. The offered reference sources were discovered to contain vertical and horizontal bar charts typical of finance- and economy-related texts. We can see an example of using a vertical bar chart in the interpretation of the term *Werbeträger* (advertising media). The data are represented as parallel rectangles (bars) of equal width. Each bar demonstrates one of the advertising media: *Tageszeitungen*, *Fernsehen*, *Werbung per Post*, *Publikumszeitschriften*, *Anzeigenblätter*, *Fachzeitschriften*, *Hörfunk*, *Außenwerbung*. The bar height is proportional to the value of each of them. This chart graphically represents the **frequency distribution of values** for various advertising media.

A horizontal bar chart is used when interpreting the term combination *ordentliche Kündigung* (dismissal with prior notification), which reflects the dependence between an employee’s period of service at the enterprise and the terms of their notification if the employment is ceased.

Line charts are included in the dictionary entry for the term *Zielbeziehung* (goals interaction). The rational semantics incorporated in the language of these diagrams excludes deviations in their interpretation. This monosemy in conveying the content is connected with the peculiarities of the logical signs. In the example given, these are the axes of goals 1 (*Ziel 1*) and 2 (*Ziel 2*) placed perpendicular to one another and the lines reflecting the regularities of achieving complementary, competing and indifferent goals (*komplementäre, konkurrierende, indifferente Ziele*).

The compositions of logical and schematic images reflecting the logical dependencies of various types confirm N.B. Mechkovskaya’s opinion that “from the viewpoint of semiotics, graphical composition is a complex sign, whose content is the object structure (sometimes “inner”, i.e. invisible, sometimes outer but immeasurable, i.e. the one that is hard to see as a whole and realize without being supported by composition). Understanding the object structure

is sometimes the same as understanding its essence or at least the most important part of its content” [10].

The formal feature of the schematic constructions revealed is the structural representation of term content by explicating the composition of separate components and their relative positions – special, logical or hierarchical ones. Abstract schematic tools help to reveal the terms’ semantics in a better way and characterize supplementary referents (structural, processual or hierarchical ones), contextually connected with the term (or term combination) being interpreted.

The functional and semantic load of the terms should be connected with a target consumer group of each of the dictionaries. The lexicographic analysis has shown that “Lexikon der Betriebswirtschaftslehre” is significantly superior to “Schüler Duden. Die Wirtschaft” in the number of terminological units and the depth of their interpretation. Let us again examine the lexical entry of *Werbeträger* from the vocabulary for specialists. It does not only reveal the meaning of this term by linguistic means but it also contains a bar chart visualizing the growth and fall of revenue from key advertising vehicles during one year of observation. The size of revenues from the use of the key advertising vehicles is vividly shown in the chart by the height of the bars and numerical values with the “+” or “-“ sign. The school dictionary “Schüler Duden. Die Wirtschaft“ has no *Werbeträger* term. The information on advertising vehicles is included in the interpretation of the *Werbung* (advertising) term in it and is represented by mere enumeration of some of them. The example given enables us to agree with the statement of M.V. Zimovaya that the semantics of terminological units can vary and adjust to the communication objectives and the level of communicants’ competence [11].

What attracts attention in addition to schematic images within creolized texts of lexicographic articles is **paragraphemed elements** used with the aim of additional term semantization. In linguistic studies, paragraphemed characters are defined as a set of non-verbal means participating in verbal communication and represented by supraphemed (font variation, color, underlining) and topographemed means (planar variation, graphical text segmentation and text segments placement in the visual field of a page) [12].

Paragraphemed means largely define the graphical organization of a lexicographic text, help convey certain correlations, facilitate the perception of the meaning within the text, and make it structure, full and cohesive. An example of using such means to express locative relations is the interpretation of the term *Standort* (location of a company). When conveying possible alternatives of location: *internationaler, nationaler, innerbetrieblicher Standort* (international, national and intraproductive location), the authors use such graphical markers of list arrangement as bullets in front of each of the points listed, boldfaced type, vertical spacing. Although these means belong to the formal text structure, V.A. Favorsky believes that they are significant for its informatory side as well.

The “Schüler Duden. Die Wirtschaft“ dictionary has been registered to have creolized texts that are complex polycode constructs including the whole sign continuum (isoverbal and paragraphemed one). The dictionary entry for the term *Konzern* can serve as an example here, as it has a complex polycode message helping to reveal the semantics of this term. The derivative concepts: *Fachverband, Kartell, Syndikat* (specialized industrial association, cartel, syndicate) necessary for its semantization are included in the dictionary entry together with pictograms symbolizing the concepts listed and fulfilling the function of double meaning actualization. Moreover, the entry makes use of color highlighting, encircling, arrows, italic to mark connections between the elements as well as special structuring and placement of scheme elements in order to facilitate the perception of its composition as a whole. The polycode signs used in the dictionary entry facilitate the revelation of special terminological meaning of the term *Konzern* to a significant extent and convey significant distinguishing notional signs of this term,

primarily its genus/species attributes.

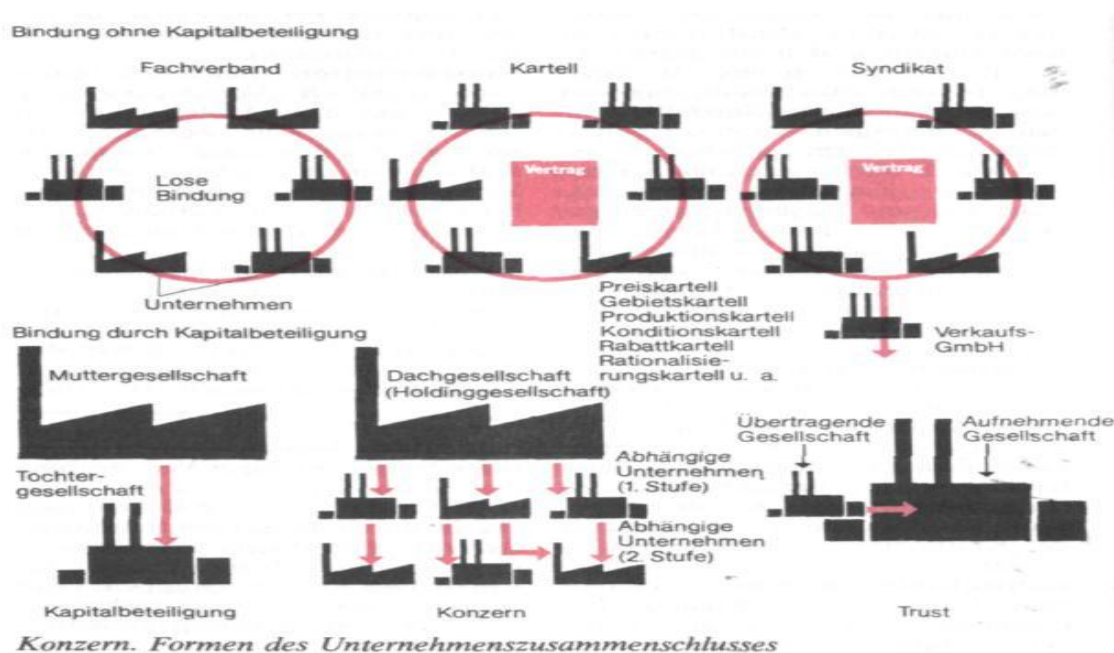


Fig. 1. Creolized text of dictionary entry for the term *Konzern*

E.N. Ryticova places strong emphasis on paragraphemed means used in the texts intended for teaching purposes considering them as necessary elements for the origin of the text as a whole and for the realization of its communicative aim [13]. To confirm this opinion we will present a dictionary entry for the term *Konzern* from Schuler Duden. Die Wirtschaft dictionary. This entry is a complex polycode element which involves the whole sign continuum (izoverbal and paragraphemed). The text of the entry contains a complex polycode message helping to reveal the semantics of this term. Derivative concepts such as *Fachverband*, *Kartell*, *Syndikat* (a specialized association of a branch of industry, cartel, syndicate) which are necessary for its semantization are included into the dictionary entry along with pictographs symbolizing the above concept and performing the function of a dual actualization of the meaning. Besides, the dictionary entry includes color hues outlining circles, pointers, italics for marking the bonds of the elements as well as special structuring and arranging the scheme elements for simplifying the perception of its composition as a whole. The polycode signs used substantially simplify the revelation of a special terminological meaning of the term *Konzern* and impart essential distinctive conceptable features of this term, above all its genetic ones.

Thus, the analysis of factual material has allowed us to reveal the nomenclature of non-verbal and paragraphemed means within genus/species dictionary definition of lexicographic articles in economic reference dictionaries of the German language and to describe the external composition of these means. In addition to studying the dictionary definitions in terms of their form, we have also analyzed the functional load of non-verbal components of a creolized text: schemes, charts and analytical tables, which made it

possible to identify the varieties of the logical relations reflected by them, such as hypo/hyperonymic, temporal, contrastive (quantitative and frequency), contrastive/diagnostic and administrative ones as well as “action – mode of action”-type relations. We have ascertained that the abstract schematic means are not connected with the description object by means of sensual similarity but have analogies between the relations of parts in the object itself and in its depictive mark. Their formal characteristic is the structural representation of its content by explicating their relative positions – special, logical or hierarchical ones. Depictive marks supplementing the verbal text reflect the semantic content of the term and make it possible to logically manipulate the information therein. The semantics of abstract schematic signs is notable for objective, rational, logical and generalized character.

In conclusion, let us note that the iconic components of economic-field dictionary entries are important notional components conveying their chief content. Non-verbal means have educational destination, the text of a dictionary entry loses its cognitive essence without them, i.e., ultimately, its textuality. Moreover, a verbal component often becomes just an intermediary and introductory part, presenting itself as a kind of a frame.

The analysis of ways and means of term description in German economic reference dictionaries allows drawing a conclusion that the abstract schematic means therein increase the informational potential of a lexicographic entry and stimulate the cognitive activity of the readers. Therefore, the dictionaries investigated may be recommended for didactic use to students of a technical higher institution, who are at the advanced stage of mastering the German language in order to develop the skills of intersemiotic recoding, structuring and analyzing complex economic information of a lexicographic article as well as to form the skills of describing and interpreting complex interdependences with the help of means of a different language.

Bibliographic list

1. Bates, E. Intentions, Conventions and Symbols / E. Bates / *Psikholingvistika* – M., 1984. – Pp. 21 – 49.
2. Sokolova, A.G. *Leksikograficheskaya definitsiya kak predmet lingvisticheskogo opisaniya: synopsis of thesis ... candidate of phil. sciences* / A.G. Sokolova. – Arkhangel'sk: [no publishing house specified], 2011. – 23 pp.
3. Kobozeva, I.M. *Lingvisticheskaya semantika: Study guide*/ I.M. Kobozeva – M.: URSS Editorial, 2000. – 352 pp.
4. Tabanakova, V.D. *Ideograficheskoe opisanie nauchnoy terminologii v spetsialnykh slovaryakh: thesis ... doctor of phil. sciences.* / V.D. Tabanakova. – Tyumen:, 2001. – 288 pp.
5. Vashunina, I.V. *Kommunikativno-funktsionalnye osobennosti nekodifitsiruemykh graficheskikh sredstv (based on German language): synopsis of thesis ... candidate of phil. sciences* / I.V. Vashunina. – M.: [no publishing house specified], 1995. – 24 c.
6. Anisimova, E.E. *Lingvistika teksta i mezhkulturnaya kommunikatsiya (based on creolized texts): study guide for students of faculties of modern languages* / E.E. Anisimova. – M.: Akademiya, 2003. – 128 pp.
7. Sorokin, Yu.A. *Kreolizovannyye teksty i ikh kommunikativnaya funktsiya.* / Yu.A. Sorokin, E.F. Tarasov // *Optimizatsiya rechevogo vozdeystviya.* – M.: RAS Institute of Linguistics, 1990. – P. 180.

8. Sklyarevskaya, G.N. Yazykovaya metafora kak obyekt leksikologii i leksikografii: synopsis of thesis ... doctor of phil. sciences / G.N. Sklyarevskaya. – L.: [no publishing house specified], 1989.
9. Kuznetsov, I.N. Referaty, kursovye i diplomnye raboty. Metodika podgotovki i oformleniya / I.N. Kuznetsov. – M.: Dashkov & C^o, 2006. – 320 pp.
10. Mechkovskaya, N.B. Semiotika: Yazyk. Priroda. Kultura: course of lectures / N.B. Mechkovskaya. – M.: Akademiya, 2004. – Pp. 151 – 152
11. Zimovaya, M.V. Funktsionalnaya “nagruzka” terminologii / M.V. Zimovaya // Nauchny Vestnik of VSACU. Sovremennye lingvisticheskie i metodiko-didakticheskie issledovaniya. – 2010. Vol. 1 (13). – pp. 95 -100
12. Linguistic encyclopedia / head editor V.N. Yartseva. – M.: Sov. entsiklopediya, 1990. – 685 pp.
13. Rytikova, E.N. Metatekst kak globalnaya sistema konstruirovaniya teksta uchebnogo posobija / E.N. Rytikova // Nauchny Vestnik VSACU. Sovremennye lingvisticheskie i metodiko-didakticheskie issledovaniya. – 2010. Vol. 12 (14). – pp. 145 -154.