Scientific Journal of Silesian University of Technology. Series Transport
Zeszyty Naukowe Politechniki Śląskiej. Seria Transport

Volume 88 **2015**

p-ISSN: 0209-3324

e-ISSN: 2450-1549

DOI: 10.20858/sjsutst.2015.88.11

Journal homepage: http://sjsutst.polsl.pl

Article citation info:
Turekhanova, A., Aitzhanova, G., Sultanova, L. Analysis of lexical antonyms in the German and Russian railway language and their classification. *Scientific Journal of Silesian University of Technology. Series Transport*. 2015, **88**, 115-120. ISSN: 0209-3324. DOI: 10.20858/sjsutst.2015.88.11.

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ANALYSIS OF LEXICAL ANTONYMS IN THE GERMAN AND RUSSIAN RAILWAY LANGUAGE AND THEIR CLASSIFICATION

Summary. Technical terminology is most intensively studied in the modern language science. The subject of the study of the given work is German and Russian railway terminology, namely, antonym, the least studied its lexis. Special attention is given to antonym classification.

Keywords: semantic relationship; space localization of objects; qualitative contrast; opposite location of objects; nominative construction; contradictory antonyms; contrary antonyms.

1. INTRODUCTION

The object of the study is railway lexis encoding concepts of objects by term units antonymous by meaning.

The subject of the study is the body of terms with opposite meaning in its verbal representation in the German and Russian languages.

The objective of the study is revealing and analysis of lexical units with the opposite meaning in the railway sublanguage and their classification.

In the course of study comparative-typological and descriptive methods are applied as the main methods of research.

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1.1. Actuality of research

The relevance of the work is defined by the absence of a comprehensive study of the German and Russian railway antonymy in their comparative-typological perspective. The monograph by Chernyshova L.A. "Industry terminology in the light of anthropocentric paradigm" [1] has direct connection with the topic of our research. However, it explores the cognitive mechanisms of lexical and grammatical features of antonyms in the term formation using the material of the railway terminology in the English and Russian languages.

1.2. Discussion

However, before proceeding to the direct analysis of antonyms in the railway language, it is important to focus on the characteristic of the term concept in general. The science about terms (study of terms) is considered to be a relatively young and at the same time, according to some linguists, rather well studied scientific area. Thus, for example, if in the 70s of the last century it was believed that "the science about language has no …quite reasonable consistent theory of terms and term systems and therefore it cannot suggest developed, strict technique of lexicographic and other descriptions of terms for needs of practice" [2], then in the 80s it was possible to come across statements that "current complaints about a suspense of many general theoretic problems are already untenable" [3].

At the end of the 20th century the situation began changing due to the advent of cognitive approach to the analysis of terminological units. In the world linguistics "terminological explosion" is observed, i.e. mass emergence of "new terms, terminological fields and the whole terminological systems, and it makes significant changes to existing terminological systems" [4]. Researchers state that "every science, every rather developed branch of knowledge possesses its own developed language" but the languages "are so little studied" [5]. At closer examination of various terminological systems it is revealed the necessity to revise a number of differential signs of the term which was considered to be stable, firm and beyond any doubt. In the traditional study of terms the lexis of the specialized language has a number of distinctive features, such as: accuracy, a single meaning, brevity, needs no context, stylistic neutrality, lack of synonymy. If a unit of specialized lexis does not correspond to the features listed above, it cannot be attributed to the category of terms.

A similar understanding of the term existed in the German linguistic space too. A representative of the Munich applied linguistics W.Wills, for example, analyzing the language of science and technology, writes that the professional language "is approaching the status of an ideal language which makes it possible to secure reliable understanding of scientific relations" [6].

The statement has repeatedly been criticized. B.N.Golovin calls in question the legitimacy of requirements imposed to the term in a number of works. According to him "some of these requirements are not complied with in the life of science, while others are meaningless" and "nevertheless, a significant portion of really functioning terminology…continues to serve the relevant branches of knowledge" [7, 8]. In A.I.Moiseyev's opinion, "signs commonly attributed to the terms and terminology in general: accuracy of the meaning, unambiguity, etc. – no more than their tendency or their desirable qualities, or, at last, requirements to well-and rationally-structured terminology" [9].

Our research also shows that not all the terms of the "railroad" sublanguage meet traditional demands imposed to it by the study of terms, therefore it is necessary to specify some disputable, from our point of view, statements concerning essential features of the linguistic phenomenon under consideration.

Accuracy is composed of two principles – unambiguity and single-form formulation, that is, every term has to express only one concept not allowing possibilities for various interpretations. Accuracy also means the lack of not only absolute doublets, but also partial synonyms. The studied language material at the paradigmatic level allows to claim that an array of specialized lexis belonging to the “railroad” sublanguage, along with the wide layer of monosemantic terms, includes also polysemantic lexis, homonyms, synonyms, antonyms characterized by blurred boundaries and, hence, requires a context, and characteristics attributed to them are rather desirable qualities since their realization in the functioning term systems is impossible.

The property of the human mind to think in contrasts, that is divide objects and phenomena of the surrounding reality into halves and create opposites from them, is reflected by the presence of antonymous terms in the technical sublanguage. (Antonymy originates from Greek "against" and "name, designation," semantic opposition).

In linguistics it is believed that the problem of antonymy in the system of terminology does not cause heated debates, as this "lexical-semantic process (in contrast to the terminological polysemy and terminological synonymy) occurs similar to analogous common language process" [10].

In the common language antonyms are words opposite in meaning and this relationship is not nominative but the result of splitting the neutral meaning into two opposites. In nouns with the direct meaning, antonymy is seen less often; it occurs, first of all, in nouns correlated with antonymous adjectives: light - darkness, heat - cold, good - evil, poverty - wealth, width - narrowness. The same is true with the verbs: to become poorer – to become rich, to love – to hate, to start – to stop, etc.

2. RESULTS OF RESEARCH

The analyzed language material shows that this type of semantic relations in the studies of scientific and technical terminology is not a subject to debate, so we cannot determine what place it occupies among other terminological systems. The "railroad" sublanguage reveals the presence of a significant body of terminological units, manifesting opposite meanings, interconnected among themselves with various relations. This may be classic antonyms (free runner (wagon), good runner (wagon) - bad runner (wagon), slow-running wagon = Gutläufer - Schlechtläufer; a powerful locomotive - a low-power locomotive = Großlokomotive - Kleinlokomotive, etc.), but more often the relationship among technical terms cannot be brought under the strict concept of 'opposition', that is lexical antonymy. Terms-antonyms, contrasting pairs of units, mutually assume each other since antonyms they designate characterize one and the same denotation from different points of view, thereby forming a single object and a single concept [11].

Antonymous pairs include two or three words in contrast to the structure of synonymous series which is normally open and has a large number of words. In the Russian language antonyms are the terms - word-combinations, in the German language antonyms are mainly compound words.

Research of the language material shows that terms are entering into antonymous relations according to one essential differential feature. In the course of study it was revealed that one and the same essence (meaning) includes terms for the opposite spatial localization of the same object or spatial localization of an action. In the nominative constructions of the given category, lexical material verbalizes also temporal characteristics of some reality fragments. Four types of opposites, singled out by us, reflect:

1. opposite location of objects in the railway space (front - back, top - bottom, inside - outside, straight - curve, initial - terminal) – departure track (initial) - arrival track (terminal) = Ausfahrgleis - Einfahrgleis; holding track - open track = Wartegleis - Fahrgleis; departure platform - arrival platform = Abfahrtsbahnsteig - Ankunftsbahnsteig; make-up yard – splitting-up yard = Zugbildungsstation - Auflösungsbahnhof; junction station – non-junction station = Knotenbahnhof – Nichtknotenbahnhof; head junction station – dead-end junction station = Anfangsknotenbahnhof - Endknotenbahnhof; curved track - straight track = Bogengleis - Geleise in der Geraden; frontal tipper – a wagon with overturning back body = Vorderkipper - Hinterkipper; substructure way – superstructure way (permanent way) = Unterbau - Oberbau; outer stretch of rails - inside stretch of rails = äußerer Schienenstrang - innerer Schienenstrang, etc.
2. opposite direction of an action name (back – front, left – right, oppositely directed) – left-hand movement – right-hand movement = Linksbetrieb - Rechtsverkehr; reverse running - forward running = Rückgang - Vorwärtsgang; return of goods to consignor – acceptance of goods = Zurücknahme - Aufnahme; departure (train) – backing movement (shunting) = Abfertigung - Zurücksetzung; making-up of trains, forming of trains – splitting up of trains = Zugbildung – Zugauflösung, etc.
3. temporal features of a certain fragment of reality - slow, minimum - maximum, increase - decrease: slow-acting braking – quick-acting braking = Langsambremse - Schnellbremse; decrease of speed – increase of speed = Geschwindigkeitsabnahme - Geschwindigkeitserhöhung; minimum speed - movement at a medium speed - maximum speed = Kleinstgeschwindigkeit - Mittelschnellfahrt - Höchstgeschwindigkeit.
4. qualitative contrast of different parts of railway reality - power, size, and shape (large - small, running - holding): minimum slope (railway bed) - maximum slope = Mindesgefälle - Maximalgefälle; bad runner - good runner = Schlechtläufer - Gutläufer (characteristic of propulsion of goods wagon); poorly-pouring goods – well-pouring goods = Schlechtschüttende Güter - Gutschüttende Güter; a powerful locomotive - a low-power locomotive = Großlokomotive - Kleinlokomotive, running, movement – layover, idle time = Lauf - Stillstand, empty running, light running/ mileage – full running/ mileage = Leerfahrt - Vollfahrt, train carrying empty stock, train of empties – train carrying full stock = Leerzug - Vollzug, high-capacity container – low-capacity container - medium-capacity container = Großbehälter – Kleinbehälter – Mittelbehälter, carrying capacity, load limit, maximum load - minimum load = Höchstbelastung - Mindesbelastung, short rail track – continuous welded rail track = Kurzschienengleis – Langschienengleis, etc. We define this type of terms as classical antonyms.

As one can see from the examples, contradictory (complementary) antonyms are widely presented in the “railway” sublanguage. Along with this type contrary antonyms also occur. Recall that contrary antonyms are the extreme members of the series, between which there are average, intermediate members and contradictory or complementary opposites complement each other to gender, so that together they form a single concept and do not have the intermediate member. The generic concept has two aspects, so the denial of one of them provides the content of the other. Examples of contrary antonyms: the minimum speed (rolling-stock) - normal speed - maximum speed = Mindestgeschwindigkeit - Normalgeschwindigkeit - Höchstgeschwindigkeit; outside rolling bearing – intermediate rolling bearing - front rolling bearing = Außenlager - Zwischenlager Vorderlager; front axle – centre axle - rear axle = Vorderradsatz - Mittelradsatz - Hinterradsatz; front (head) car (wagon) – centre trailer (wagon) - intermediate trailer (wagon) - last (tail) wagon = Vorderwagen - Mittelwagen - Zwischenwagen-Endwagen; span (bridge) – centre span (bridge) - intermediate span (bridge) – last (terminal) span (bridge) = Öffnung -

Mittelöffnung - Zwischenöffnung - Endöffnung; outside rail - inside rail - centre rail = Außenschiene - Innenschiene – Mittelschiene.

Proceeding from the above examples, antonyms of the "railroad" sublanguage are subdivided into four types: a) antonyms expressing qualitative contrast; b) antonyms expressing the opposite spatial localization of objects; c) antonyms containing temporal properties of objects and d) antonyms expressing spatial opposite-direction of the name of an action.

3. CONCLUSION

Analysis of lexical units of the railway sublanguage has revealed a wide presence of antonymy in the German and Russian term systems. The classification of terms advanced by us seems to be quite complete because according to our observations the concepts of one and the same essence they are referred to are not only opposed to each other, but also mutually suppose, complementing each other to generic so that together they form a single concept. The generic concept has two aspects, so the opposition of one to another provides the content of the other. Both real objects and abstract concepts can stand behind the terms-antonyms. Nominative constructions of this category of terms in the German language structurally belong to one and the same part of speech and are presented by compound words Adv. (Adverb) + S and Adj. + S, in Russian parts of speech mentioned above are word combinations.

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Received 03.09.2014; accepted in revised form 17.05.2015