LOOK ACADEMIC PUBLISHERS
OPEN ACCESS

IEJME — MATHEMATICS EDUCATION
2016, VOL. 11, NO. 5, 1281-1296

Distinctive Cognitive Features of Automotive Terminology Structure in American English and German Language

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ABSTRACT

The article deals with car terms from the aspect of new developing terminology science in Eastern Europe, which is called cognitive terminology. The research concludes the difference between a general language concept and a terminological concept. Going through all stage of research, will be define several linking words which are aimed for car-worker's comprehension in different countries. In the paper the frames of car (automotive) terminology in American English and German language were designed on the basis of analysis of a notion part of a terminological concept, which is represented by terminological definition, and also with the help of basic concepts, which are parts of this structure. There were found basic concepts of car terminology in American English and German. The paper also describes the structure of the frame of automotive terminology. Besides that, the article shows results of an interview, which was held on on-line bases among staff of automotive companies "GMC" (the USA) and "Volkswagen" (Germany).

KEYWORDS
Cognitive terminology, professional worldview, frame, automotive terminology, terminological concept, term definition

ARTICLE HISTORY
Received 17 December 2015
Revised 7 April 2016
Accepted 11 April 2016

Introduction

Along with development of cognitive linguistics terminological studies have entered a new stage, where a term is considered as a dynamic formation, which serves as a tool for verbalization of a terminological concept. The fast developing science "Cognitive Terminology" postulates difference between a general word concept and a terminological one. A term used not to be viewed as a carrier of cognitive information, but nowadays we can speak about a separate professional worldview in any industry, the formation of which is based on usage of isolated language of professional communication (also Language for Special Purposes "LSP"). Existence of a professional worldview gives a possibility for special

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terminological concepts to be formed. Thus, being isolated within LSP, they differ from general language concepts. Moreover, each person divides surrounding reality, transforming it into a system of conceptual notions. That proves logical reasons for the thought about formation of a separate conceptual system as a result of cognitive activities of staff in any industry. This system is actualized in terms through functions of LSP.

Terms are elementary cognitive-informational models that contain data about a specific object or phenomenon. Cognitive terminology plays an important role not only by studying the development of scientific cognition and researching national psychology, which is reflected in difference of terminological systems, as well as by exploration of general traits of associative thinking, but also by analysis of ways of professional culture evolution and elaboration of a country itself. Thus, there is no doubt that the cognitive aspect of terminology studying is the most promising in comparison with typological, formal and semantic analysis of terminology, because it shows us the way to the inner world of a term as a linguistic unit of LSP and gives us a possibility to explore hidden structures of knowledge that every term contains.

Materials and Methods

Is a terminological concept identical with a general language concept?

Automotive terminology is an important terminological system in communicative, cultural and historical sense. As well as any other terminological system it has its own specific conceptual structure. Studying a term as a carrier of cognitive information, I agree with a point of view of scientists (Novodranova, 2010; Zorina, 2012; Golovanova, 2011) who equal a term to a concept and claim that each term contains certain knowledge, which represents various types of experience gained in a professional field.

Automotive term as an informational concept represents certain structured knowledge. This knowledge is a hierarchical set of concepts verbalized by a term (Novodranova, 2010). Such structure reflects a particular knowledge that was gained in a separate professional area as a result of cognitive activities of professionals: categorization, conceptualization and verbalization. That is to say, a car term contains experience of this industry, which has been obtained since the construction of the first car prototype.

In connection with said above we can assume that a car term concept consists of several layers. In our opinion, unlike a general language concept its main level is a notion stratum, because the notion stratum represents essential characteristics of an automotive term concept and conveys information about knowledge of a stated area of professional communication. Taking into consideration the peculiarity of a car term being a nominative sign and a nuclear of LSP in automotive business that denotes scientific notion and at the same time is a container of special professional knowledge in this field, the following conclusions can be drawn:

- Cognitive nature of a term can be discovered through linguistic analysis of its definition.
- Definition verbalizes fully a notion denoted with a term. Thus, it represents a notion stratum of a terminological concept.

- Each seme, which can be extracted from meaning of a car term, is a representative of cognitive information contained in this term.
- Terminological system of automotive business embodies "professional worldview", in the contrary to general language, which produces a multiplicity of worldviews, an infinite variety of interpretation of real and virtual worlds.

Whilst studying a term as a container of cognitive information let us delve correlation between a terminological concept and a general language concept.

The majority of scientists think that a term concept has three strata: notion stratum, image stratum, value stratum, which means that the structure of a terminological concept is similar to a general language concept. If we view LSP as a subdivision of general language and in the means of nature and function we put an equal sign between a term and a word, than we can assume that a terminological concept doesn't differ from a general word concept. (Vorkachev, 2004; Stepanov, 2007; Popova & Sternin, 2010)

I.E. Korotaeva (2004), for example, in her research of characteristics of lexico-semantic field "Transportation" in American English doesn't separate a term and a word, claiming that a terminological concept is identical to a general language concept. She defines a concept as "a notion, which serves for explanation of mental and psychological resources of our consciousness and its informational structure, which reflects knowledge and experience of people".

S.G. Vorkachev (2004) equates mentioned phenomena and segregates in a terminological concept a notion stratum (a structure of definition and a structure of characters), image stratum (cognitive metaphors) and a value stratum (etymological and associative characteristics). Therefore, the scientist doesn't emphasize a notion stratum as the main one. J.S. Stepanov (2007) seconds his opinion and argues that although the notion stratum is one of the levels in a terminological concept, nevertheless, it is not as important as a research of an image stratum.

I disagree with a statement of absolute identity of these two types of concept, because it has its weak points. First of all, LSP should be considered as a separate type of language with its own peculiarities. Because it differs from general language in its basic purpose, subjects, users and discourse. If we equated them, than a notion of a term would be understandable to every user of a general language as well as to a professional. A term functions only within LSP and is used to represent concepts of a restricted professional field or activity. A word on the other hand is used to designate a concept of all types of activities that speakers share. Terminological concept encodes specific knowledge, general language – general knowledge. I believe, that the only exception can be a process of determinologization, when a term due to its often usage in mass-media is becoming a part of general language, at the same time not losing its specific notion but from now on being a representative of a general language concept.

Having defined that a terminological concept differs from a general language concept, we should study its peculiarities. Based on research work of modern linguists, I think that a terminological concept has three strata: notion stratum, image stratum, value stratum (Golovanova, 2011; Cabre, 2011; Popova & Sternin, 2010; Fateeva, 2013). They are the same as a general language concept has. The difference is that a notion stratum is more important for a

terminological concept, and image and value strata are more important for a general language concept. A notion stratum of a term is fully represented in its definition. A definition of a term expresses all characteristics of an object or phenomenon named with this term. In this case that is the most important thing that distinguishes a term from a word. Unlike a terminological definition, a definition of a word from general language explicates not all characteristics of an object or phenomena named with this word. For example, M. T. Cabre states that "a concept can be represented in dictionaries either by a definition or by an illustration. Terminological definitions are more descriptive than any other type of definition. It describes concepts in exclusive reference to a special subject, including all characteristics of a term" (Cabre, 2011). This proves the point that for a terminological concept a notion stratum is more important, as a terminological definition verbalizes its concept. If we look at the work of Z. D. Popova and I. A. Sternin (2010) we will find an evidence of them equating the structure of general language word and a term. At the same time scientists state that "an idea of including all differentiated characteristics of objects and phenomena named with this word into its definition has the right to exist only for terms. For most words of general usage characteristics included in their lexicographical definitions are not differentiated, especially for nature phenomena" (Popova & Sternin, 2010).

Each term codes in itself a particular professional knowledge. This knowledge carries information about experience of a particular professional field. For terminological research the most important stratum of a concept will be the one that uncovers this experience. In the research of cognitive nature of cinema terms scientist sees knowledge as a result of group professional experience (Fateeva, 2013). She accents that due to specificity of LSP, for a cognitive terminological analysis a studying of a notion stratum, which is verbalized in a term definition, is enough.

Taking into consideration that a notion stratum not only represents all main characteristics of an object or phenomena named by a term, but also encodes experience gained in a particular professional field, I think that its investigation will allow us to disclose cognitive nature of automotive terms. A notion stratum is fully verbalized in a term definition. Each seme that may be distinguished in a meaning of an automotive term is a representative of cognitive information, because term meaning correlates with its concept as a communicative relevant part and mental unity.

Analysis of terminological groups, which build a conceptual skeleton of a frame in automotive terminology in German language and American English

The theory of cognitive modeling of different human knowledge, one of which is a terminological one, operates a notion of a frame as a model that is the most relevant conceptual figure of picturing and verbalization of such type of information (Lee & Wagenmakers, 2014). Frames as cognitive structures not only fix a position of named objects, but also show correlation between its elements, in other words, they represent the most suitable mechanism for modeling of mental space, which is captured in a terminology of a particular industry (Faber et al., 2012). Taking into consideration what was mentioned above, I study car terminology not just as a unity of terms of a particular part of

a professional area, but as a conceptual structure that depictures a system of notions. Thus, for a keen insight into conceptual system of car terminology and full disclosure of its basic concepts I must build its frame.

On the first stage of frame analysis of car terminology I needed to separate main groups of terms, which are used nowadays in this industry in both countries. For us to find out which terms are most common, I formed questions, answers to which helped us to build a clear image of terminological tools, which are used by professionals in automotive area. These questions are:

1. What systems and equipment provide movement of a vehicle?
2. What kind of equipment does a modern car contain?
3. How is a car manufacturing organized?
4. What are the main objects of traffic?

Having answered these questions, based on my experience of working in a car industry and with the help of professionals from Germany and the USA, I managed to sort out the corpora of car terms into basic groups.

Table 1. The list of basic terminological groups in car industry of Germany and the USA

American English car terminology	*German car terminology*
What systems and equipment provide movement of a vehicle?	
Mechanical systems	Antriebe
Driving force	Antriebskraft
Junctions	Fahrzeugknoten
Machine elements	Werkstücke
What kind of equipment does a modern car contain?	
Interior equipment	Interieureinrichtung
Interior systems	Interieursysteme
Entertainment units	Unterhaltungsanlagen
Entertainment systems	Unterhaltungssysteme
Seating	Sitze
Materials used for decorating	Dekoreinlagen
Exterior equipment	Exterieureinrichtung
Exterior systems	Exterieursysteme
Safety systems	Sicherheitssyteme
Types of cars	Wagentypen
How is a car manufacturing organized?	
Procedures	Produktionsprozesse
Materials used for construction	Materialen, die für Fahrzeugproduktion benutzt sind
What are the main objects of traffic movement?	
Objects of traffic	Verkehrsobjekte
Types of cars	Wagentypen
Roads	Bahnen

The search for basic concepts in a frame of car industry terminology has a great interest for linguistic world, because it gives us an image of a notion tools on which complicated relations between subjects of this kind of business are based on. Conceptual structure of this industry cannot be understood without a deep comprehension of its notions, because a notion part of a basic concept has a complex structure and is formed by conceptually united groups of terms. Each one of these groups carries a micro notion, and when they are united, these

groups form conceptual features of basic concepts. In order to determine conceptual features of a basic concept the analysis of correlation between main groups of terms, which are united conceptually and form a mutual notion, must be conducted. Reference to a mutual notion can be uncovered by studying a term definition. The presence of common nuclear semes tells us about the reference to the same notion, thus, groups of terms, which have identical nuclear semes, are correlated conceptually and verbalise a notion part of a basic concept.

Having studied the corpora of car terms in American English and in German, I grouped them according to the conceptual features that they represent. To these groups belong: mechanical systems / Antriebe – systems that provide car parts movement and control them; driving force /Antriebskraft – equipment that is responsible for the driving movement of a car; junctions / Fahrzeugknoten – component elements that can be constructed separately from the other parts of a car or a mechanism and that can only function jointly with the other car units; machine elements / Werkstücke – articles, which are component parts of mechanisms of a vehicle or a car body, and are produced from homogeneous material without use of any construction procedures; interior equipment / Interieureinrichtung – all the fragments of a car salon and exterior equipment / Exterieureinrichtung – details of an outer side of a car, which are integral and complete a car image.

To the groups forming basic concepts of a car terminology in German language and American English also refer interior systems / Interieursysteme and exterior systems / Exterieursysteme – systems that either control or help to control component parts of interior and exterior. The group entertainment units / Unterhaltungsanlagen combines terms that denote equipment used for rest, entertainment and communication of both: a driver and a passenger. Technologies, which are implemented into entertainment equipment are joined into group entertainment systems / Exterieursysteme. Terminological groups that are also a part of a base, but occupy a smaller part in the area of car industry, are: materials used for decorating / Dekoreinlagen, safety systems / Sicherheitssyteme and types of cars / Wagentypen.

Comparative characteristic of automotive terminology frames in American English and German language

According to J.V. Zorina (2012), any frame is a hierarchical structure, thus, in consciousness of representatives of a professional team conceptual area of automotive terminology can be represented as a scheme. A scheme always has main and secondary components. The conceptual skeleton of the automotive terminology model consists of correlated basic concepts. Each basic concept comprises certain terminological groups, which include terms representing the notion fixed in this terminological concept. Herewith, all basic concepts are united in a structure of a higher order – a frame of automotive industry.

Having studied the corpora of automotive terms in American English and German language, I have conducted a cognitive research and built frames of a car terminology (Figures 1 and 2).

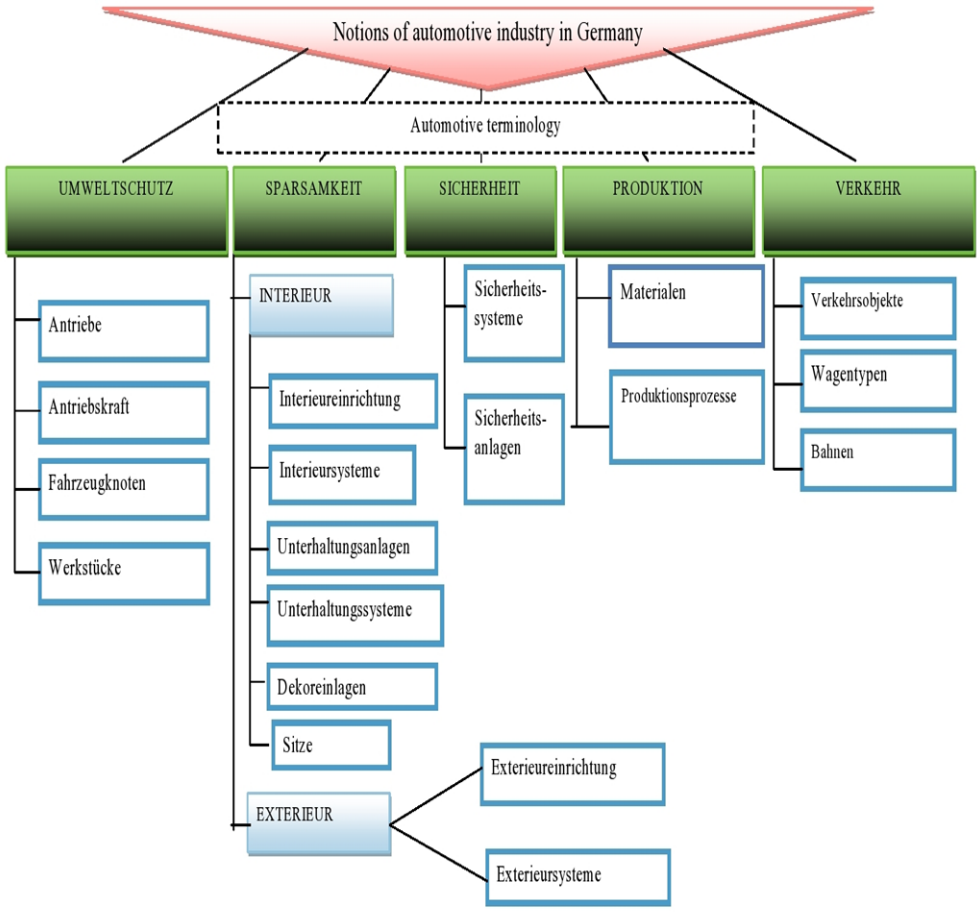

Figure 1. The frame of automotive terminology in German language

Each frame consists of five basic concepts, which represent a certain notion in automotive industry. Conceptual characteristics of a basic automotive industry concept are verbalized in terms which, in turn, are classified on the basis of their conceptual indices and are united into a basic concept in terms of verbalization of a common notion.

Frames of automotive terminology in both languages have their similarities and differences. The filling of a frame is the same for American English and German language, that is to say, terminological groups of automotive business have their matches in studied languages (Bosch, 2000). Those groups coalesce in five separate basic concepts within LSP used by professionals in Germany and the USA. Terms denoting car equipment and parts that are responsible for a vehicle movement: mechanical systems, driving force, junctions, machine elements – in American English and Antriebe, Antriebskraft, Fahrzeugknoten, Werkstücke – in German are fused into concepts CONSTRUCTION and UMWELTSCHUTZ.

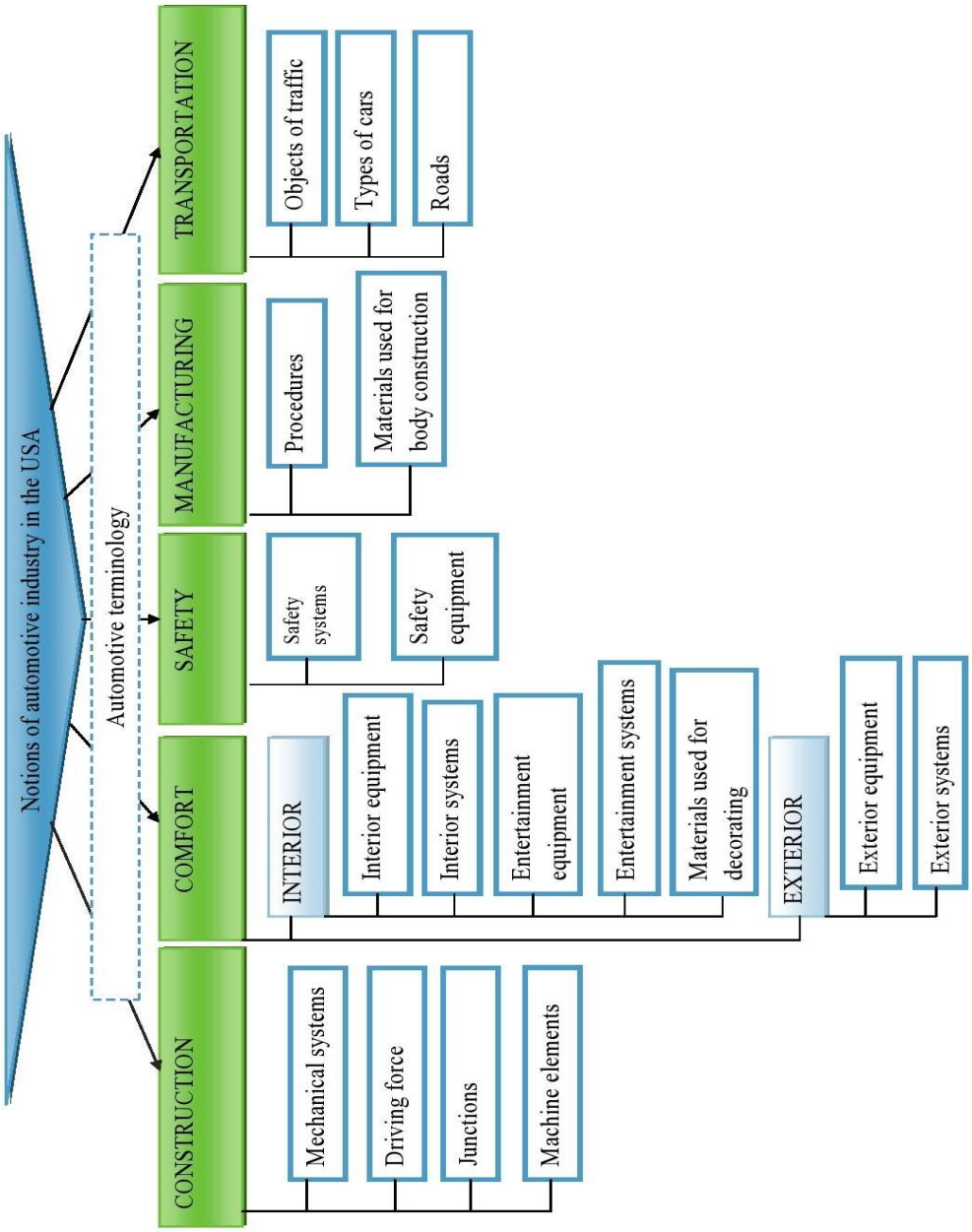

Figure 2. The frame of automotive terminology in American English

Terminological groups referring to names of a vehicle interior and exterior interior equipment, entertainment units, interior systems, seating, materials used for interior decorating, equipment, exterior systems – in American English band into a basic concept COMFORT and Interieureinrichtung, Interieursysteme, Unterhaltungsanlagen, Unterhaltungssysteme, Sitze, Dekoreinlagen, Exterieureinrichtung, Exterieursysteme – in German are joined with a basic concept SPARSAMKEIT. Terminological groups designating safety equipment Sicherheitssysteme, Sicherheitsanlagen and safety systems, safety

equipment verbalize a common for both languages concept – SICHERHEIT / SAFETY. Terms referring to car manufacturing processes and materials used for car construction represent a terminological concept PRODUKTION / MANUFACTURING. Terminological groups Verkehrsobjekte, Wagentypen, Bahnen and their correspondences in American English objects of traffic, types of cars, roads depict a terminological concept VERKEHR / TRANSPORTATION.

If one takes a look at the models of frames in American English and German language, one can clearly see the difference in two modules. Though basic concepts SICHERHEIT / SAFETY, PRODUKTION / MANUFACTURING and VEHRKER / TRANSPORTATION are common for both studied languages and have the same terminological filling, basic concepts CONSTRUCTION / UMWELTSCHUTZ and SPARSAMKEIT / COMFORT, in contrary, have equal terminological verbalization, but are not common for the USA and for Germany. The following question arises "Why do corresponding terminological groups in different languages verbalize different terminological concepts?"

The results of investigation have shown that in German language terminological groups denoting equipment that provide movement of a vehicle are united into a terminological concept UMWELTSCHUTZ, whereas, their correspondences in American English verbalize a completely different terminological concept CONSTRUCTION.

This conclusion was made on the basis of cognitivly studying the term definitions included into the terminological groups mentioned above. In my research I view a seme as a microconcept and assume that all terms, which have common semes express a common notion, which is a part of a certain terminological concept. For me to understand a relation of terminological groups to a basic concept, I have analyzed a definition of a nuclear of this concept, which is a lexeme of the same name. While studying its definition, a notion representing a specific terminological concept is determined, as well as semes that must be present in the terms verbalizing conceptual characteristics of this terminological concept.

In order to answer the question "Why do corresponding terminological groups in different languages verbalize different terminological concepts?" lets analyze terminological groups denoting equipment that provide movement of a vehicle.

Terminological groups mechanical systems, driving force, junctions, machine elements verbalize in American English a notion part of an automotive industry concept CONSTRUCTION.

Definition of a lexeme of the same name is "Construction – a thing constructed; a complex entity constructed of many parts" (Webster Dictionary).

The notion explicated in the basic terminological concept CONSTRUCTION is "inner structure of a car", where the internal construction of a vehicle with all parts that make a car move is revealed. Taking into consideration the fact that a seme is viewed as a microconcept, let's assume that all terms verbalizing this concept must have nuclear semes 'a part of inner car construction', 'system', 'detail'.

As an example I will analyze terms included into terminological groups, which according to our assumption verbalize a concept CONSTRUCTION: engine cooling (terminological group – mechanical systems), engine

(terminological group – driving force), transmission (terminological group – junctions), belt (terminological group – machine elements).

The next stage is to explore the conceptual links between terms and notions that they represent by delving their definitions.

Engine cooling – a system inside a vehicle controlling the temperature of internal combustion engine parts to prevent overheating and to maintain all operating dimensions, clearances, and alignment by a circulating coolant, oil, and a fan (McGraw-Hill, 2003).

Engine – a machine in which power is applied to do work by the conversion of various forms of energy into mechanical force and motion (McGraw-Hill, 2003).

A car consists of a resource of power and energy, which is an engine and a transmission, which provides implementation of this power. M. Webster dictionary (2003) defines transmission as "Transmission – is an assembly of parts including the speed-changing gears and the propeller shaft by which the power is transmitted from an engine to a live axle" (McGraw-Hill Dictionary, 2003).

Belt (mechanical) – a detail, a loop of flexible material used inside a vehicle to mechanically link two or more rotating shafts, most often parallel. There are many different kinds of belts, for instance, fan belt, which is used in a system of engine cooling and is defined as "in automotive engineering – a taut rubber belt that transfers torque from the crankshaft to the shaft of the cooling fan on an engine". V-belt is a part of transmission and a timing belt is used in engines and it synchronizes rotation of a crankshaft and a camshaft for engine valves to open and close during intake and exhaust cycles of each cylinder.

The analysis has shown that all these terms in the structure of their definition have semes 'a part of inner car construction', 'system', 'detail'. (Stylidis, Wickman & Söderberg, 2015) Thus, they have direct conceptual connection, which means that they can be united into a basic concept of automotive terminology on the basis of a common notion that they explicate. Al four terminological groups define internal construction of a vehicle and represent a notion "inner structure of a car", which is a part of a basic concept CONSTRUCTION.

To prove our point of view we consulted with employees of car industry in the USA and interviewed them on on-line basis. Among the participants there were representatives of stuff of the automotive company GMC (the USA) – men and women from 30 to 55 years old.

To the question, "What in your opinion unites groups of terms mechanical systems, driving force, junctions, machine elements?" we received the following answers, which we generalized into two groups.

Table 2. Correlation of terminological groups mechanical systems, driving force, junctions, machine elements determined in terms of the interview of the representatives of the automotive company GMC (the USA)

The answers	*The number of respondents, who gave this answer*
All these terms refer to inner construction of a vehicle.	15
They describe elements that are a foundation of a car and a guaranty of its functioning.	6

Having examined the answers of representatives of LSP in automotive industry, the conclusion was made that mechanical systems + driving force + junctions + machine elements = CONSTRUCTION (Figure 3).

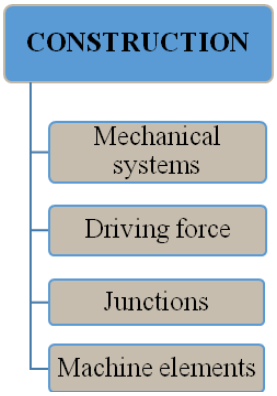

Figure 3. Structure of a basic terminological concept CONSTRUCTION

Following the same scheme, we will analyze terminological groups in German denoting equipment that provide movement of a vehicle: *Antriebe, Antriebskraft, Fahrzeugknoten, Werkstücke* and find out whether they really verbalize a basic terminological concept UMWELTSCHUTZ.

In order to determine conceptual characteristics of a concept UMWELTSCHUTZ I examine a definition of a nuclear of this concept.

Umweltschutz – alle Maßnahmen, die dazu dienen, die Umwelt zu erhalten, zu schützen und nicht zu gefährden (all means for saving environment, protecting it and preserving from pollution and destruction) (Duden Wörterbuch, 2011).

The basic terminological concept UMWELTSCHUTZ (environment) explicates a notion "means for saving, protecting and preserving environment from pollution". All term verbalizing the basic concept UMWELTSCHUTZ must contain in the structure of their definition a seme 'umweltschutz (environment protection)'. This will show their reference to the notion mentioned above and determine their cognitive correlation.

Let us delve terminological groups: Fahrzeugknoten, Antriebe, Antriebskraft and Werkstücke. To find conceptual links between them and to define a basic concept of automotive industry that unite these groups we will study the definitions of terms included in them.

1. Elektroantrieb – ist ein Antrieb mit einem Elektromotor (oder mehreren Elektromotoren), der von einer Regelung geregelt wird. Beim Elektroantrieb wird elektrische Energie in Bewegungsenergie umgewandelt. Für seine Verwendung als Fahrzeugantrieb sind vor allem praxistaugliche Batteriesysteme mit hoher Kapazität zu entwickeln. Der Elektroantrieb gehört zu den effizienten und umweltverträglichen Technologien, an denen Volkswagen forscht (Electric drive – regulated drive with one or more electrical engines. In electrical drive electrical power is turned into kinetic power. For its application in a vehicle, first of all, it is necessary to use batteries with high capacity. Electric drive is widely used in eco-friendly technologies by Volkswagen company) (Wyhlidal, 2012).

2. Hybridantrieb – ist ein Knoten und besteht aus der Kombination von zwei Antriebsprinzipien, wie zum Beispiel einem TSI- und einem Elektromotor. Der Hybridantrieb gehört zu den effizienten und umweltverträglichen Technologien, die Volkswagen bündelt (Hybrid module – is one of the junctions used in a car consisting of a combination of two different drives, for example, TSI-engine and electrical engine. This is one of technologies that are being developed by Volkswagen for their vehicles, and the priority is protection of environment and reduction of emission) (Technik Lexikon bei Volkswagen, 2016).

3. E-Motor – bezeichnet einen elektromechanischen umweltverträglichen Wandler (elektrische Maschine), der elektrische Energie in mechanische Energie umwandelt. In herkömmlichen Elektromotoren wird die Kraft, die von einem Magnetfeld auf die stromdurchflossenen Leiter einer Spule ausgeübt wird, in Bewegung umgesetzt. Damit ist der Elektromotor das Gegenstück zum Generator, der Bewegungsenergie in elektrische Energie umwandelt. Elektromotoren erzeugen meist rotierende Bewegungen, sie können aber auch translatorische Bewegungen ausführen (Linearantrieb). Elektromotoren werden zum Antrieb verschiedener Arbeitsmaschinen und Fahrzeuge (vor allem Schienenfahrzeuge) eingesetzt (Electric engine – is an eco-friendly mechanism that converts electric power into mechanical. Typical e-engine functions by means of emission energy during the interaction between the magnetic field and electric current in the coil. Thus, the electric motor is the opposite of the generator, which converts mechanical energy to electrical energy. Electric motors usually create rotary motion, but they can also perform reciprocating motion (linear drive). Electric drive is used in various engineering and automotive) (Wyhlidal, 2012).

4. Wicklung – ist ein Werkstück des E-Motors, der wird eine um eine Achse verlaufende Aufwicklung eines Materials im festen Aggregatzustand bezeichnet (A coil – is a detail of electrical engine made of metal or other material used for transferring current) (Wyhlidal, 2012). In this case a seme 'environment protection' can be traced in the meaning of a word E-Motor, which is a part of definition of Wicklung.

Having examined the definitions, we can clearly say that each of them contains a seme 'umweltschutz' which proves the fact that they are joined in a basic concept of German car terminology UMWELTSCHUTZ, which is verbilized by the following terminological groups: Fahrzeugknoten, Antribe, Antriebskraft та Werkstücke (Figure 4).

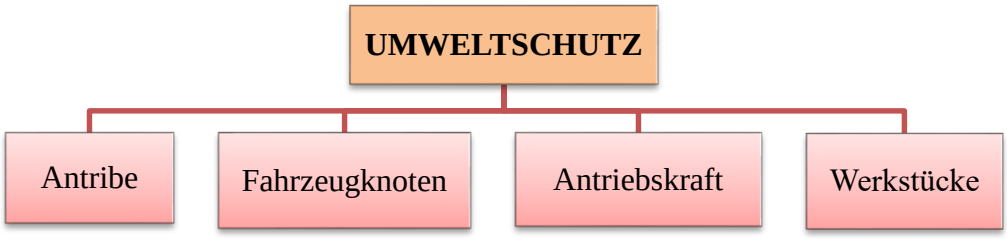

Figure 4. The structure of a concept UMWELTSCHUTZ

To prove our conclusions and to summarize the results of our study, we interviewed employees of a car manufacturer Volkswagen (Germany). The participants were men from 30 to 55 years old, who have been working for this company for over two years.

To the question, "What is the principle that can unite these terminological groups: Fahrzeugknoten, Antribe, Antiebskraft and Werkstücke", we received the following answers, which we generalized into two groups.

Table 3. Correlation of terminological groups Fahrzeugknoten, Antribe, Antiebskraft and Werkstücke determined in terms of the interview of the representatives of the automotive company Volkswagen (Germany)

The answers	*The number of respondents, who gave this answer*
We want German cars to be environmentally friendly and construct them this way.	14
These are the parts of car construction, the inner structure of a car.	9

Most answers of representative of automotive business in Germany bring us to the point that Fahrzeugknoten + Antribe + Antriebskraft +Werkstücke = UMWELTSCHUTZ (Scheme №4).

During the research of term definitions an archiseme of each terminological group can be traced. As a seme is a carrier of cognitive information, in other words, it is a microconcept, thus, an archiseme of each unity of terminological groups will indicate the main conceptual characteristic of a basic terminological concept, which they verbalize. In American English terminological groups denoting equipment that provide movement of a vehicle have the archiseme 'a part of inner car construction', while their correspondences in German language have an archiseme 'umweltschutz (environment protection)'.

Discussions

Taking everything into account, we can answer the question: "Why the same parts of cars have various designations in different countries?" As we find it depends on sources of it. Sometimes there was a kind of misunderstanding which in a total lead to naming same things as different one (Goodsell, 2013). In future, these steps made big problems with cooperation of various teams from different countries. To avoid such problems in a closer future, we need to make a detailed look on this issue with making some decisions.

Results

I believe that such lie of the land didn't come about by random chance and have logical basis. I assume that the difference originates in distinction between thinking of representatives of professional automotive world in both countries. This difference is caused by peculiarities of development of the USA and Germany. The USA puts on the first place innovative technologies aimed to make a vehicle as powerful as possible, whereas in Germany Volkswagen company, for example, is actively developing eco-friendly cars. With each step of its growth the German automotive industry is trying to make a car safer for environment and that is why in the term definitions of modern car business in Germany we can trace the archiseme 'umweltschutz (environment protection)', and in their correspondences in American English the archiseme is 'a part of inner car construction'.

It is difficult to escape the conclusion that peculiarities of country culture form the difference in professional worldview of automotive industry representatives, and this, in turn, results in verbalization of diverse terminological concepts by corresponding terminological groups in American English and German language.

Conclusion

Automotive terminology is a part of language of professional communication (also Language for Special Purposes "LSP") of automotive industry. Taking into consideration peculiarities of LSP functioning, a terminological concept differs from general language concept. The notion stratum is the most important level of the terminological concept, because it reflects the whole knowledge gained by any professional area, which is in our case – automotive industry. Each country have distinctive features of economic and historic development that impact the thinking of staff in automotive industry, thus cognitive processes of members the car business, form certain concepts, among which there are common basic concepts as well as those that differ due to notion they contain, which is specific for the certain country.

By researching automotive term definitions we can define the conceptual characteristics that they verbalize and what terminological concepts they form. I have a great hope that the developed methodology of building a frame of automotive industry can become a foundation for further terminological studies in different branches of industry and can make a contribution to the growth of a young science – cognitive terminology, which has a huge potential for expansion and can help to explain the relation between human thinking and the formation of terminology.

Acknowledgements

I wish to thank everyone who helped me complete this article. Without their continued efforts and support, I would have not been able to bring my work to a successful completion.

I wish to express my sincere thanks to my supervisor Prof. Julia Romanovska, Principal of the English Department of National Dragomanov University, for her continuous support of my PhD study and research, for her patience, motivation, enthusiasm, and immense knowledge.

I am also grateful to Prof. Korolova Alla, Head of the General and Contrastive Linguistics and Romaic Philology Department in Kiev National Linguistic University. I am extremely thankful and indebted to her for sharing expertise, and sincere and valuable guidance and encouragement extended to me.

I take this opportunity to express gratitude to all of the participants of the interview, held in GMC and Volkswagen companies. I also thank my parents for the unceasing encouragement, support and attention.

I also place on record, my sense of gratitude to one and all, who directly or indirectly, have lent their hand in this venture.

Disclosure statement

No potential conflict of interest was reported by the authors.

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