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SEMANTIC AND PRAGMATIC STUDY OF SPECIALIZED LANGUAGES (ENGLISH LEXICON FOR THE OIL AND GAS INDUSTRY)

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ABSTRACT of the PhD thesis in philology

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KEYWORDS: semantic and pragmatic aspects, signifier and signified, diastratic stratification, ESP (English for Specific Purposes), specialized language, specialized lexicon, general language, general lexicon, general functional-semantic field, specialized functional-semantic field, metasemic concept, metasemic transfer, terminological metaphors.

CONCEPTUAL FUNDAMENTALS OF THE RESEARCH

Topicality of the theme and research relevance. With the purpose of professional communication, specialized language is one of the elements that facilitates the achievement of expected objectives. Recognizing that there are linguistic resources (lexical, semantic, pragmatic, grammatical and functional) that users can use to achieve their communication goals within their professional environment, specialized studies have given to specialized lexicon the name of "language for specific purposes".

Our research aims to investigate Technical English (TE) in terms of its applicability within technical field. Reflection on understanding the English for Specific Purposes (ESP), an extremely significant branch of ELT (English Language Teaching), has a long history, often confused with General English (GE). Often, in contradiction, the opinions of different linguists on its historical evolution shows an attempt to understand ESP and to respond to the specific needs of students pursuing specific objectives (professional, academic or scientific).

Therefore, the study and knowledge of specialized language are issues related to the theory of the *glottic* sign, functional-semantic fields, style and variation of language. It is well known that ESP, from the perspective of the language sign motivation, has not received special attention, only on certain branches of ELT. We have not found any researches that would have analyzed ESP, especially TE (Technical English), for the oil and gas industry in syntagmatic and paradigmatic terms, based on the concept of relation between signifier and signified.

Because of the evolution of different fields of technique, it is required to develop the lexical material, which is consisted of lexical systems (functional-semantic fields). Therefore, there is a need to use a specific lexicon for certain unique technical terms that should correspond to the development and enrichment of the motivational lexicon. In turn, this builds horizontal and vertical relations within lexical system. The topic chosen by us is current due to the synchronous, semantic and pragmatic approach of the specialized lexical units from the oil and gas field, especially for their correlations in Romanian.

The decoding of the petroleum lexicon, known as being characterized by uniqueness and complexity, must be followed and decoded from a contextual point of view through an analysis both from a conceptual, denotative and connotative point of view. The accuracy of a technical information is secured by using specialized lexical unit by the specialists in the field of communication. For these reasons, our professional activity in the use of specialized lexicon from the oil and gas field has given us a real and necessary documentation on this study and has given us the opportunity to boldly dare to go back in time and investigate some semantic and pragmatic studies in literature.

The topicality of the research consists in determining the fact that English for Specific Purposes and General English are two different entities. Also, the topicality of the research consists in the proposal to interpret the glottic unit from the specialized languages through metasemy. It is more accessible to interpret a technical term when using the correlation between sign – meaning - interpretation. The topicality of our study is also explained by the fact that any engineer specialized in oil and gas production, mechanics, operations or wells drilling, construction, chemistry or anything else needs a minimum knowledge of English when it comes to an international working environment. Although there are different requirements and needs in the field of each job, there are aspects of vocabulary and grammar that most engineers need to understand.

Our study approaches, from a theoretical, practical and pedagogical perspective, aspects of the correlation, analogy and asymmetry of the specialized lexical units through various referential concepts that underlie the cognitive metaphors. A series of glottal units specific to the lexicon of the oil and gas industry that shows difficulty regarding learning and familiarizing with the vocabulary specific to this field, are researched. The exploration and investigation of the specialized language from the perspective of metasemic designation of technical elements allowed us to clarify some aspects of realities from the technical field, which urges us to support the existence of a certain comprehensibility.

Degree of study of the research topic. It is well known that ESP (English for Specific Purposes) terminology is rich and involves a significant interpretation of Romanian-English semantic equivalents, and knowing the technical field is fundamental in the science of communication. That is why it was imperative to continuously advice myself with the technical field on scientific texts or paragraphs.

Our study focuses on the work of researchers in the field of general linguistics and lexicology, semiotics and terminology. The first chapter is dedicated to theoretical aspects, with reference to the fundamental models of semiotics and pragmatics formulated by Umberto Eco, Georges Mounin, Ferdinand de Saussure, Charles S. Peirce, Emile Benveniste, Valentina Marinescu, John Fiske, Eugen Coşeriu etc., where we relate the concepts of language, signifier, signified, diastratic stratification, functional styles that will be useful during our research. Regarding the lexicological, semantic and pragmatic fields, we had as a fundamental basis for our thesis the works of the representatives in the field, such as: Angela Bidu Vrănceanu, Angela Savin, Mariana Pitar, Rita Temmerman, Vasile Bahnaru etc.

From the perspective of general and specialized language and diastratic aspect of language, we have related from literature the opinions presented by Eugen Coşeriu, Mirela-Ioana Borchin, Liliana Botnaru, Ion Coteanu, and from a methodological point of view, in European area, the analysis studies of stylistics outlined in the works of Eduard Sapir, IR Galperin, T. Hutchinson and A. Waters, T. Dudley - Evans and MJ St. John, David Carter, Peter Strevens, Penny Ur, Martin Joos etc. predominate. In our analytical approach on identifying and describing the semantics of lexical units, we have focused on the works of J. Trier (lexical units), G. Ipsen (semantic fields), Angela Savin (functional-semantic fields), Vasile Bahnaru (lexical system, of concepts) etc.

In order to achieve the proposed objectives, we have collected, selected and synthesized the most representative English and Romanian technical terms in the oil and gas field. Many dictionaries have been also used which provided us with necessary information on the meaning of general and specialized terms. Among the most fundamental dictionaries and glossaries that helped us to conduct the study: *Key Words for Oil & Gas Industry*, 2013 (author C. COBUILD), *LONGMAN Dictionary of Contemporary English*, 1995, *Dictionary of oil - exploration*, *exploitation*, 2000 (L. AVRAM, M. TROQUET) etc.

Attempts to clear up the problem of conceptual metaphor are being outlined by the fundamentally argued research in this field, by George LAKOFF and Mark JOHNSON, and in order to determine the conceptual models we have taken into consideration the opinions of Mircea BORCILĂ and Vasile BAHNARU (metasemy).

Purpose of the research. Born, both from the experience gained in the field and from a need for *English for specific purposes*, this paper incorporates and identifies the linguistic aspects from the main departments of oil and gas industry by highlighting some characteristics of two language units: Romanian and English. The presence of shortcomings regarding the terms from specialized language, in this case, the oil and gas terminology, led us to initiate a semantic and pragmatic analysis in order to fill the gap between the technical part from petroleum industry and the non-specialized one, by highlighting and capturing the lexical, syntagmatic and morpho-syntactic aspects of both languages. In this thesis, we aim to establish the semic structure of the elements of

conceptual semantic fields from petroleum industry, which contributes to identifying all meanings incorporated within the glottic unit, semes that have remained undefined in the current technical or general dictionaries.

Research objectives. In the field of semantics and pragmatics there have been many researches regarding the structure of lexicon from a diachronic (in terms of semantic evolution) and synchronic (functional-stylistic) point of view, with respect, in particular, only to the general language, but with regard to the technical one, there is a lack of summary studies.

The increased interest towards TE phenomenon and the need to conduct a structured study, which deepens the chosen topic, have determined the choice of the given topic. Also, the controversies created regarding the correct equivalences of the Romanian terms with the English ones have motivated our objective to establish the horizontal relations within the lexical system of the specialized or general interdisciplinary language (functional-semantic fields), whose glottic units were subjected to metasemic changes.

Based on the above, the current study can contribute to clarify some specialized lexicon issues from pragmatic and semantic analysis point of view, whose aim is to provide an investigation and a professional decoding of the petroleum lexicon being characterized by uniqueness and complexity, as well as to present a unique system of codes and abbreviations to which, at a contextual level, it corresponds only a single meaning in a single context, as well as a single reference and conceptual image. The objective of the hereby thesis is also to explain the study of glotic material in the form of conceptual-semantic fields, whose elements have been researched using various methods and procedures of investigation, to establish those meanings, which have not yet been found in specialized dictionaries or to divide stable lexemes or word combinations, used in the oil and gas industry, according to certain criteria and principles.

Research hypothesis. English language skills are in high demand around the world, as more and more companies and organizations are engaged in international business operations through English. This paper contains vocabulary elements that will help developing English language skills in business and engineering. Also, the importance of vocabulary used in various situations will be relevant, making the difference between colloquial and scientific English, precisely due to this comparative-contrastive presentation between lexical elements of the two idioms.

Being a summary of various approaches regarding technical style / language, the quintessence of this study is represented by the carefully selected material and presented on work

departments. A selection of some lexical units less known to non-specialists were selected, precisely in order to explain their correct and appropriate use by translators in the field. All these elements and aspects lead to delivery results that should eliminate and avoid the occurrence of any ambiguity in their use.

Summary of the research methodology and justification of the chosen research methods. What we want to propose here is, in fact, a varied way of research aimed at a multilateral knowledge. Methods such as: descriptive, substitutional, contextual have been used. In addition, some procedures of structural-semantic method are used in the thesis.

During performing the study, various sources of specialized languages have been used, supported by dictionaries and specialized monographic studies, so the method of documentation has been used. The development of a Romanian-English / English-Romanian bilingual corpus of the multidisciplinary technical language has been done using the comparative-contrastive method. Diachronic and synchronous investigation methods were used, reinforced by examples and practical activities meant to activate and consolidate the autonomy of communication in Romanian. In more detail, the use of research methods and techniques will be presented in Chapter 2 of the thesis.

Novelty and scientific originality of the research. A glossary of oil and gas field terms has been developed as an expression of the ESP problem, which is theoretically studied from the position of motivating its occurrence, existence and use, primarily within language teaching. A comparative-contrastive study on the development of the lexicon in the petroleum field at the level of Romanian language is conducted by developing a fundamental investigation on the English for Specific Purposes (ESP) from the perspective of metasemic designation of technical elements based on motivation, in the light of the general pragmatic and semantic concepts, together with a professional decoding of the lexicon from the oil and gas industry from different functional-semantic fields; it is proposed to highlight the unique semantic and structural features of the Technical English (TE), as well as some linguistic interferences between the General (GE) and Specialized Language (SL); additional semes of the lexemes from the oil and gas field are identified by the author, based on the specialized documents, in relation to those already highlighted in the general language dictionaries.

CHAPTERS SUMMARY (content of the PhD thesis)

Summary of the thesis chapters, focusing on the investigations performed and their need to achieve the purpose and objectives of the research. In our approach, we have initiated the research with the **Introduction** where we present the topicality and importance of the researched topic, the degree of study topic, the purpose and objectives of the research, the research hypothesis, the scientific novelty and originality, the applicative value of the thesis, the summary of the research methodology, the structure and the chapters of the paper.

Chapter 1 of the thesis, **"Theoretical approaches of specialized languages"**, is designated to theoretical-scientific aspects, with reference to the fundamental models in literature based on scientific documentation and critical interpretation of the studies in the field. We present and highlight the semantic and pragmatic aspects regarding the glottic sign, we differentiate the general lexicon from the specialized one, the specialized languages (LS) versus the diastratic stratification, we talk about the signified and signifier relation at the level of general lexicon and specialized one from the technical field (petroleum industry) which we will find throughout the work; we distinguish the specialized lexicon - the thematic organized system of lexical units in the field of science and technology; we frame our research under the functional-semantic aspect; we offer a classification regarding the relation between ESP lexicon, GE and their branches, in this case the Technical one (TE); we highlight and describe the concept of metasemia, we identify and describe the classification of lexical units according to semantic fields.

Chapter 2, "Methodological approaches in the study of specialized languages", is dedicated to the presentation of specific scientific research methods (data collection, processing and interpretation) used. The research tools have been described, ethical considerations taken into account in conducting the research and the data analysis according to the research results have been presented.

Therefore, we have built a specialized corpus in order to represent the elements of the research, the scientific register and technical discipline, based on the main sectors of activity in the oil and gas field. We demonstrate how a semantic framework for lexical knowledge can suggest richer relations between lexemes in the text beyond its mere coexistence. Candidates were identified and selected (based on their frequency of use and their semantic complexity) and analyzed

individually, as well as contextually in order to formulate hypotheses of equivalence in both languages.

The methods of research provide authentic ways to obtain useful data based on which scientific information can be highlighted. Regarding the design and data gathering or analysis, the research methods used are traditionally of the qualitative and quantitative type (information processing), followed by those of data interpretation (comparative interpretive methods).

One of the research methodologies exemplified in this chapter is a combination of the corpus-based approach that seeks to identify the functional equivalence of terms in specialized language.

No.	Compararea corpusului	TE Corpus	GE and TE Corpus
1.	Stage 1	Stage 2	Stage 3
2.	Specialized Language.	Identifying and selecting the possible candidates (lexical terms / units) for each functional-semantic field.	e i

Table 1. Equivalence perspective - Stage 1[prepared by the author]

The basis of the semantic analysis of LS on the corpus data was performed, adopting both a **qualitative and a quantitative perspective**. Both processes took place in parallel so that while we used different interpretations of the lexeme in specialized vocabulary and tried to establish the relation and addiction among its various new meanings, we simultaneously consulted the corpus data to support the decisions we have made. Chapter 3 exemplifies the quantitative process in detail.

From the perspective of the **syntagmatic structure** or the means of building up the lexical units presented in the conceptual microfields in the next chapter, we have noticed in the selected examples the presence of two-members or multiple members terms, plus one or more determinants where nouns make up the lowest percentage statistically, however, combinations of stable lexemes with *Noun* component (in a sample of about 39 elements) are the most common.

Following an inventory, the most of them proved to be the lexical units from TE, and from a morpho-syntactic point of view, the most productive remain the two-members structures (Noun+Noun), followed by the three-members ones (Noun+Noun+Noun). In a sample of 32 multiple members of glottis units, we specify that their main formation structure is Noun+Noun and Noun+Noun+Noun.

The data and results obtained were recorded and presented for comparison using the **classification method** which consisted in accounting a considerable number of lexical units or combinations of stable lexemes with semantic-distributive formulas (from several conceptual micro fields). The results obtained were highlighted in percentage in the graphs presented in the research. And to establish the influence of semantic-distributive formulas, we have chosen as a method of scaling, the **method of semantic differential**. Therefore, following the data gathering of the results got from the statistics, it results that the stable word combinations with *Noun* have a proportional rate of 26%, the lexical units from TE with two-members structures (Noun+Noun) and the three-members structures (Noun+Noun+Noun) are in a proportion of 20%, the component of the semantic-distributive formula of glottic units represents 33%, and regarding the presence of lexical units, there is a percentage of 21%, which leads to the statement that there is a semantic balance at the level of specialized technical language.

In order to highlight the vertical and horizontal relations of the field elements, the method of researching the functional-conceptual fields was used. Following the model proposed by the researcher Angela Savin-Zgârdan¹ regarding the semicomposition of lexical units, we proposed for analysis a part of the conceptual microfield of Oil. In order to see the semicomposition of the glottic units in the given micro field, we have elaborated their decomposition into the same components. The most significant seme is S_1 (the field in this case - *oil and gas industry*) which plays the role of a hyperlexem in relation to other semes of the field elements which, in turn, are in the role of hypolexema in relation to S₁. Most semes are represented by the elements developed by this one. Oil seme goes into the semic structure of all glottic units causing monosemantic relations in some cases (oil well, oil field) or hyperonymic (crude oil) ones. As we have notice, the common seme oil establishes relations of hyponymy (names the generic concept, differing by at least one distinctive feature and which is in a coordinating relation). A semic analysis of lexical units and the correlative noun led us to the statement that they have common characteristics (express the same part of speech, have the same meaning), but also some distinctive ones (polysemantic character, the type of semantic relation developed). Each lexeme has its specific meaning in the technical field, and some are defined by the related context.

¹ SAVIN - ZGÂRDAN, A. Valori lexico-gramaticale ale locuțiunilor verbale românești în plan sincronic și diacronic. Chișinău: Editura Bons Office, 2001, p. 24-25, p. 79-82. ISBN 9975-9629-0-4

Chapter 3, "Classifications and particularities of the lexicon in the oil and gas field", consists of three subchapters and it is dedicated to general versus specialized language and to general functional-semantic fields versus specialized / motivational ones. We have studied the oil and gas industry field, which has produced in time a variety of specific terms that are difficult for the general English dictionaries to cover. We have presented the lexicon specific to each area of activity, because the facilities and systems from the oil and gas industry are broadly defined, depending on their use in the production flow.

We have outlined the functional-semantic fields of the lexical units being guided by finding the meaning in the specialized dictionaries, after looking up a correlation with the semantics of the word in Romanian. Regarding the selection of terms, we have followed the semantic correspondence between the terms from general language and those from specialized Romanian lexicon. We considered the proposed examples relevant to mirror the corpus outlined in each field, as well as the Romanian-English semantic equivalents.

A special place in this chapter is held by the analysis of monolexical and polylexical language units, and the syntagmatic expressions that led to the enrichment and evolution of the specialized vocabulary from the oil and gas industry. At the same time, we present classifications of technical terms according to a functional-semantic fields where we classify the technical terms in relation to the operational stages in the field.

Thus, from a perspective of a specialist in the area, we define the following sectors: *Upstream, Operational, Exploration and Production, Well Workover and Intervention Jobs and Drilling.* Throughout this chapter, we present, explain and analyze groups of lexemes, phrases, expressions which we classify in conceptual fields and examine their equivalents in Romanian. We offer an insight on the semantic relations between specialized words according to their semic structure, as well as a theoretical and practical basis of the syntagmatic and paradigmatic relations developed by them.

We develop a lexico-morphological analysis regarding the syntagmatic composition, on stable word combinations with semantic-distributive formulas and we debate a classification of their component structures. We identify, classify and graphically represent the following phenomena: the syntagmatic composition referring to the type of lexical units (two-members, three-members or multiple members noun, verbal and adjective structures), polysemy, synonymy, as well as hypohyperonymy. Based on the corpus selected from each conceptual microfield, we determine the productivity of these lexical units based on lexical composition.

We classify and develop a statistical study regarding the most productive structural units from a morpho-syntactic point of view. The study of the technical corpus, as well as the analysis of the selected TE inventory, determines us to specify the fact that the composition process is the most productive (over 70%).

We have noticed that the most significant classifications of lexical units are based on the structural, syntactic-morphological criteria (two-members, three-members or multiple members noun, verbal or adjective structures). The statistics performed at the level of each conceptual microfield showed us that the highest percentage (over 80%) belongs to the semantic-distributive formula: Noun + Noun. We want to support the above by providing, as an example, the following graph:

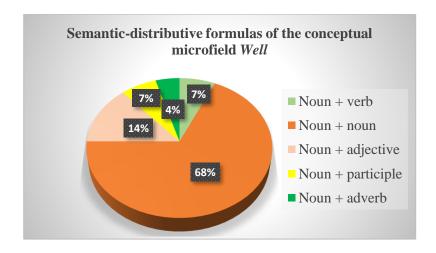


Figure 1. Semantic-distributive formulas of the conceptual microfield *Well* [prepared by the author]

SL merges through paradigmatic relations (polysemy, synonymy) or semantic hierarchy (hyponym - hyperonym). The polysemy of a technical term, whether external or internal, is determined by context. Synonymy is present in TE, but the frequency is quite low (about 20%) compared to GE, as it can be confusing. This is due to the fact that SL is characterized by uniqueness and precision, and the context is defining. The hypo-hyperonymy phenomenon is found within the technical SL as a structured and hierarchical conceptual system characterized by the relationships it develops.

Chapter 4, "Metasemic conceptual models. Particularities of the oil and gas language", is designated to the study and presentation of metasemic concepts in the specialized technical language. We focus on presenting the aspects of the metaphorical phenomenon, we offer terms created by metasemic transfer that refer to either equipment or complex processes or concepts in our field of research in order to facilitate the understanding and interpretation of technical language. In the development of the specialized technical lexicon, metaphor is one of the significant ways to present technical concepts, and metasemia is a cognitive phenomenon that involves processes and phenomena of knowledge at a conceptual level.

In this chapter, we have presented SL (Specialized Language) from the perspective of terms correlation, analogy and asymmetry between various referential concepts that underlie the cognitive metaphors.

Here, we present opinions of different scholars where metaphor, that expression "unitară, spontană și imediată a unei viziuni, a unei intuiții poetice, care poate implica o identificare momentană a unor obiecte diferite sau o hiperbolizare a unui aspect particular al obiectului și chiar o identificare între contrarii" ² is metasemia. Thus, whether it is a type of cognitive and / or aesthetic metaphor or "o identificare momentană a unor obiecte diferite"³, studies on terminological metaphor have increased significantly in recent years. For example, we highlight Vasile Bahnaru's opinion who distinguishes "metasemia implicativă de natură estetică" (relation between the poetic image and idea of the message) and "metasemia implicativă de natură denominativă" (sign - linguistic reality relation)⁴. Fundamentally argued, Vasile Bahnaru gives to this metasemia an intrinsic value and specifies the need of being studied not as "un lucru în sine", but in "corelație cu fenomenele de limbă adiacente, precum sunt derivarea lexicală, conversiunea, diferențierea formală și semantică a unităților lexicale etc."⁵.

We have tried to analyze various technical words in contexts, from different referential concepts / conceptual semantic fields that are subject to metasemia, and to achieve our goal, we have proposed to study some metasemias that, in terms of categorical signified, can be single-category, containing only noun and polycategorial signified and which may include several categories of signified (verbal, adjective, adverbial).

 ² COȘERIU, E. Creația metaforică în limbaj (V.O. 1952). În *Omul şi limbajul său. Studii de filozofie a limbajului, teorie a limbii şi lingvistică generală*. Iași: Editura Universității "Al. Ioan Cuza", 2009, p. 180. ISBN 978-973-703-386-4
 ³ COȘERIU, E. Ibidem, idem.

⁴ BAHNARU, V. Mutații de sens: cauze, modalități, efecte. Chișinău: Ed. Știința, 1988, p. 72. ISBN 5-376-00398-1

⁵ BAHNARU, V. Elemente de semasiologie română. Chișinău: Editura Știința, 2009, p. 263. ISBN 978-9975-67-641-0

In this chapter, the emphasis will be placed on the research of relations and semantic, structural and comparative analysis of the terms in the oil and gas industry formed and developed by metasemia, both in English and in Romanian. We have tried to identify the characteristics and distinctive features of the specialized terminological model in the petroleum industry, especially in the area of drilling, production or well operations, which are presented with regard to the terms origin. With this chapter, we want to identify the characteristics specific to the process of conceptual modeling of the metasemic fragment of the semantic system in this industry, as well as revealing its specific features.

The materials used for analysis and study are specialized dictionaries and also general dictionaries. Here, we have examined the metasemic aspect of English technical terms, formed with the help of the metaphor, based on the selected corpus; we have investigated the general SL in the oil and gas industry, both in Romanian and English using lexical and semantic analysis and comparative and contrastive analysis of the conceptual petroleum models (the nature of the *oil and gas* functional - semantic field and semantic use of metasemic concepts).

We have analyzed the problem of terminological metasemia in scientific and technical texts where the groups of terminological metaphors in the lexical fields of petroleum industry are defined. The analysis shows that the identified lexical units play an important role in representing the worldview.

Throughout the analysis of metasemic concepts from the current modern English, context has a particular importance, which is very useful and decisive in determining the scientific metasemic features, because technical texts are addressed and designated to both specialists and non-specialists in the field. In the context of the analyzed examples, we have considered necessary to present a list of essential technical words formed by metasemic transfer in order to be noticed the semantic changes that led afterwards to new terms in the oil field.

Therefore, during our metasemic models analysis we have found, for example, conceptualization on the following words: *well, gas, oil, pipeline, tools, equipment, drilling operation, production operation, well operation* having as sources the following: object, man, living organisms, plant, gas, nature.

We have developed a selection of words that we highlighted in terms of their concepts discovered, with the semes: "activity", "result of the activity".

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Analyzing two categories of conceptual models, we have revealed that metasemic transfer is a productive word formation way, because this linguistic process has evolved in the same time with society and technology. The novelty of the Specialized Language metaphorization refers to building a new terminology, using in a comparative-contrastive way the General Language, Technical Language and the context. These new terms acquire new semantic value, becoming semantic units with new meanings, so their meaning becomes strictly specialized in a certain field. Metasemization of the meanings of some well-known lexemes depends both on the semantic way of forming terms and on the evolution of technologies used in the development of certain technical operations or technological processes. The formation of new meanings based on the already existing terms is done practically by adjusting their value or function in a certain field.

The conceptual models analysis is supported by additional information, such as images of the equipment or its components. The identified metasemic models operating in the functional semantic system of the oil and gas industry correspond to the metasemic models of the General Language.

These examples confirm the ideas presented and give us the right to state, with certainty, that the metasemic transferring process is characterized by a defining feature. Namely, the presence of two or three metaphorical components, such as: *junk basket* (coş de gunoi/freză magnetică), *spider* (păianjen/broască cu pene), *fishing tool* (unealtă pentru pescuit / unealtă pentru instrumentație), *pony rod* (pompă cu prăjini mai scurtă), *monkey board* (podul podarului), *horse head* (cap de cal/ cap de balansier), *mouse hole* (gaură ajutătoare pentru adăugarea bucății de avansare), *mouse trap* (capcană șoarece /coruncă cu clapă pentru prăjini de pompare) *fishtail bit* (coadă de pește/ sapă cu lame) etc. Referring to the evolution of these stable polylexical units, we can specify that they were formed during and throughout the development and implementation of new technologies and technical equipment, undergoing many transformations and linguistic updates.

Throughout this chapter, we have analyzed two categories of metaphors, namely: **symmetrical terminological metaphors** and **partially similar terminological metaphors**. From the metaphorical concept point of view, we have found that *symmetrical metaphors* are more than the *partially symmetrical* or *asymmetrical* ones.

Metaphorization of the conceptual term contributes to creating new lexemes and stable polylexical combinations, to developing general and specialized lexical system, both at the level of English and Romanian. These kind of typologies resulting from the metaphorical transfer help to highlight some conceptual images, some syntagmatic contrasts and some ways of developing and evolving a specialized and specific technical field.

We have paid special attention to a special word, we say. If, in the technical field *Christmas tree* is an equipment with several technical functions under the name of *cap de erupție*, the decoration and symbol of the Christmas tree (*Christmas tree*) are not taken into account in the process of metasemic conceptualization, but the aspect of the equipment structure (set of devices installed at the well head) is associated with the image of the Christmas tree.

From our point of view, metaphorization of this term creates the risk of not understanding the message within General Language, but within specialized field, this technical concept is clear and precise.

What we can emphasize, following the corpus under analysis, is that English is a source of highly suggestive metasemic phrases, structures and expressions within Specialized Language. An important role in the development of SL is represented by producing a unique system of codes and abbreviations, which, at a contextual level, corresponds not only to a unique meaning in a given context, but also to a single reference and conceptual image.

The end of the chapter presents characteristics and particularities of the Specialized Language from certain functional-semantic fields together with codes and abbreviations developed by them. The four chapters of the thesis are followed by **general conclusions and recommendations** that summarize the syntheses and results of this study.

GENERAL CONCLUSIONS AND RECOMMENDATIONS

Our approach in the thesis *Semantic and Pragmatic Study of Specialized Languages (English Lexicon for the Oil and Gas Industry)* had as a reference point the need to fill a real bibliographic gap regarding the development of petroleum lexicon at the level of Romanian language by conducting a fundamental investigation on *English for Specific Purposes* (ESP), starting from the summary of the most fundamental results of the scholars in the field, continuing with a lexical-semantic and conceptual metasemic analysis of Specialized Language (SL), especially the technical one (TE). Thus, after studying the material selected from literature, but also a corpus extracted from technical field, we consider the following conclusions:

- 1. There is a distinction between language and vocabulary: language is conceived as an ability, a human faculty at emic level, while vocabulary is a specific achievement of this ability at ethical level; language is related to different forms of language practice, such as variation, language styles or dialects.
- 2. Ensuring communication within a specific professional activity is done through Specialized Language (SL); this uses functional extralinguistic semiotic codes in order to correctly send the message for a text comprehension.
- 3. SL is a closed, objective, integrated system, but open to permanent development and linguistic adaptability of communication to the needs of specialists.
- 4. Petroleum technical-scientific text is, indeed, consisted of lexico-semantic elements that is being influenced by extralinguistic realities.
- 5. Functional styles within Specialized Languages play a fundamental role.
- 6. Relation between glottic sign and the object it represents, between signified and signifier, is related to the functional-semantic conceptualization of the specialized lexicon.
- Diastratic stratification represents the differences between social strata (socio-cultural strata); lexicon variations do not exist without the correlation diatopia - diastrasia diaphasia.
- 8. SL may be related to diastratic differentiation, and between general and specialized lexicon, specialized training would interfere. Specialists in various fields of activity use specific language systems, such as language functional styles.

- 9. Regarding SL, compared to or related to diastratic stratification, in both cases they are related to socio-cultural key factors.
- 10. SL sums up the lexemes corresponding to the fields of professional activity; particularity of the Specialized Language is given by the fact that terminology consists both of lexical units from General Language and specialized lexicon specific to professional field. Meaning of lexemes is related to the reference systems.
- 11. SL is characterized by uniqueness, neutrality, precision and objectivity; it lacks stylistic interpretations, unlike the common one which can be characterized by flexibility or contextual interpretation.
- 12. Learning a foreign language has become one of the newest and most prominent fields in teaching English as a foreign language due to a revolutionary development in linguistics; for this phenomenon we use the notion of *English for Specific Purposes ESP*.
- 13. Scientific and technical language, used within scientific / technical style, is situated on a key level of a social, political, economic, cultural interest compared to the other functional styles, precisely due to the evolution of our civilization; it is a language with specific particularities, characterized by a unique complexity of contextual, metalinguistic or referential, functional and situational aspects; the function of the scientific style is a cognitive one and the meanings of the lexical units are denotative.
- 14. From a linguistic point of view, a functional style can be defined as a system of expressive means specific to a special sphere of communication.
- 15. Terminology used in the oil and gas industry is an image of technical and technological equipment, a term-object, concept-object correlation which, together with the terms borrowed from other fields of knowledge, form a precise and well-defined terminological system.
- 16. Specialized lexicon means an additional field of knowledge, which includes information, concept names in a specialized field or in all specialized fields.
- 17. Professional field for specific purposes is closely correlated with a series of basic, conceptualized terms that cannot be comprehensive in another field.
- 18. It is noticed the presence of a considerable number of stable words combinations or lexical units in the English SL formed by a syntagmatic composition process. Starting

from their structure, we have classified and represented graphically the technical terms from the point of a semantic-distributive formula view.

- 19. The most significant classifications of the lexical units are based on the structural, syntactic-morphological criterion (two-members, three-members or multiple members words combinations with noun, verb or adjective components). The statistics performed at the level of each conceptual microfield showed us that the highest percentage (over 80%) belongs to the semantic-distributive formula: Noun + Noun.
- 20. SL merges through paradigmatic relations (polysemy, synonymy) or semi-hierarchical relations (hyper and hyponymy). The polysemy of a technical term, whether external or internal, is determined by context. Synonymy exists in TE, but its frequency is quite low (about 20%) compared to GE, as it can be confusing. This is because SL is characterized by uniqueness and precision, and the context is defining. The hypo-hyperonymy relation can be found in the technical SL in the form of a structured and hierarchical conceptual system, characterized by the relations it develops.
- 21. TE lexicon has developed a unique system of codes and abbreviations to which, at a contextual level, do not correspond only to a single meaning, a single reference or a conceptual image.
- 22. Language, together with specialized languages, make up a symbolic material background, a symbolic universe. Within the Specialized Language there is a terms migration from General Language; to its formation, metaphor is one of the most significant way to present technical concepts, and metasemia is a cognitive phenomenon that involves processes and phenomena of knowledge at a conceptual level.
- 23. In TE, most of the terms created by metasemic transfer are referring to the description of equipment, complex processes or concepts in our field of study. There are terms created by metaphorization, there are terms that come from meaning changes.
- 24. Understanding the functional and structural concepts is the essence of understanding, the way in which language is used in academic and professional context.
- 25. Using the method of functional-conceptual research in order to highlight the vertical and horizontal relations of the field elements, performing a qualitative analysis of the authentic texts from the oil and gas industry, using the method of semic analysis, the perspective of identifying the functional equivalence of the TE terms, the comparative

interpretive methods, the scaling method, the semantic differential method allowed us to offer a more complete, more detailed picture of a dynamic and heterogeneous specialized lexicon.

- 26. Semic analysis of the conceptual-semantic fields elements allowed us to detect those semes incorporated in the glottic unit, which have not been identified by general dictionaries.
- 27. SL has been reflected from the perspective of correlation, analogy and asymmetry of terms between various referential concepts underlying cognitive metaphors.
- 28. Metaphor belongs to speech, to ethical level, it is present within human activities becoming a metasemic phenomenon.
- 29. English is a source of monolexical and polylexical units, extremely suggestive metasemic phrases within Specialized Language.
- 30. Conceptual metaphors, by which processes or objects are designated, belong to the category of resystematic metaphors, since to conceptual field of object or process is associated the signifier.

Specialized Language, as a subsystem of General Language, shares with it a number of common features. At the same time, Specialized Language, being consisted of specific lexical units, is subject to specific rules. The relevant conclusions for the present study would be that the research in the field of petroleum engineering is mainly oriented towards innovation and practical results, materialized in the development and improvement of the existing lexical units. Therefore, our wish was to create a dictionary or a corpus of lexemes and stable words combinations specific to this discipline.

The research results allow us to express the following recommendations:

This thesis offers a justified basis for identifying specific elements by highlighting a detailed textual analysis of an authentic and well-selected corpus. The careful highlighting of the bilingual texts can become a source of information in teaching an academic material for engineering, for studying Specialized Languages, but also for developing some complex teaching materials based on authentic information. The materials of our study could be used by lexicographers to compile specialized technical dictionaries by including those new meanings of lexemes from the oil and gas industry field, presented in the given thesis, which have not been identified before.

The results of our research represents an integrated study that can be used to develop academic, scientific or methodological courses. It can be dedicated to students, specialists in the field, students, translators and to all those who want to improve their knowledge in a foreign language.

The materials of our PhD thesis will be able to represent a support and a fundamental basis of information to *English for Specific Purposes* (professional, technical, scientific, etc.), *General English, Terminology, Technical Linguistics, Stylistics* or *Linguistics*. The materials presented in this study can be used to prepare general or bilingual dictionaries / glossaries.

This paper offers a basis for identifying the specific elements of the Technical Language. The careful analysis of the authentic texts may become a source of information for teachers, translators and English users for science and technology, giving them a more complete, more detailed picture of the given specialized lexicon.

This study has conceptual effects at a semantic, pragmatic and specialized lexicon level with useful pedagogical involvements in highlighting the disciplinary particularity of this lexicon. The qualitative extension of the authentic texts in different fields provides English language users from the field of science and technology with a more complete picture of the language from the oil and gas industry, but also a possibility to initiate a deeper knowledge of the essence / core of ESP (TE).

REFERENCES

- BAHNARU, V. *Elemente de semasiologie română*. Chişinău: Editura Știința, 2009, p. 159-263.
 288 p. ISBN 978-9975-67-641-0.
- BAHNARU, V. *Lexicologia practică a limbii române*. Chișinău: Institutul de Filologie al AȘM, 2013, p. 39-46. 490 p. ISBN 978-9975-4460-4-4.
- BAHNARU, V. Mutații de sens: cauze, modalități, efecte. Chişinău: Editura Știința, 1988, p. 72. 156 p. ISBN 5-376-00398-1.
- COȘERIU, E. *Creația metaforică în limbaj* (V.O. 1952). În: Omul şi limbajul său. Studii de filozofie a limbajului, teorie a limbii şi lingvistică generală. Iaşi: Editura Universității "Alexandru Ioan Cuza", 2009, p. 167-197. 458 p. ISBN 978-973-703-386-4.
- 5. COȘERIU, E. Introducere în lingvistică. Cluj: Editura Echinox, 1999. 144 p.ISBN 973-9114-73-8.
- DUDLEY-EVANS, T., & St JOHN, M. J. Developments in English for Specific Purposes: A multidi-disciplinary approach. Cambridge: Cambridge University Press, 1998. 320 p. ISBN 13: 9780521596756.
- 7. PĂTRAN, F. Conceptualizarea metaforică și limbajul specializat din domeniul tehnic. În: Inovație în Educație, nr. 5, Buftea, martie 2020, p. 450-451. ISSN 2668-7097.
- 8. PĂTRAN, F. Functional-Semantic Features of the Lexicon in the Oil and Gas Field: Petrol Microfield. În: Speech and Context, nr. 2(XII), Universitatea de Stat "Alecu Russo" din Bălți, Republica Moldova, 2020, p. 26-32. ISSN 1857-4149.
- 9. PĂTRAN, F. Limbajele specializate versus stratificarea diastratică. În: Intertext, nr. 3/4 (51/52), anul 13, Chișinău, ULIM, 2019, p. 93-98. ISSN 1857-3711 / e- ISSN 2345-1750.
- PĂTRAN, F. Particularitățile studierii limbajului specializat în domenii tehnice. În: Intertext, nr. 1/2 (49/50), anul 13, Chișinău, ULIM, 2019, p. 263-268. ISSN 1857-3711 / e- ISSN 2345-1750.
- PÅTRAN, F. Semantica terminologiei generale versus terminologia specifică (câmpul funcțional-semantic petrol). În: Intertext, nr. 3/4 (55/56), anul 14, Chişinău, ULIM, 2020, p. 63-68. ISSN 1857-3711 / e- ISSN 2345-1750.
- SAVIN-ZGÂRDAN, A. Valori lexico-gramaticale ale locuțiunilor verbale românești în plan sincronic și diacronic. Chișinău: Editura Bons Office, 2001, pp. 24-25, p. 79-82. 136 p. ISBN 9975-9629-0-4.

PUBLICATIONS ON THE THEME OF THE THESIS

1. Cărți de specialitate:

- PÅTRAN, F. *Check Up Your English*. Ediția a II-a, Craiova: Editura Inkpress, 2018. 84 p. ISBN 978-606-766-549-9.
- PÅTRAN, F. *English for Beginners*. Auxiliar Didactic. Craiova: Editura Contrafort, 2018.
 52 p. ISBN 978-606-45-0069-4.
- PÅTRAN, F. *English for Intermediate*. Auxiliar Didactic. Craiova: Editura Contrafort, 2018. 37 p. ISBN 978-606-45-0072-4.
- PATRAN, F. Practice Old and New Ways of Teaching English. Craiova: Editura Inkpress, 2018. 72 p. ISBN 978-606-766-548-2.
- 1.5. PĂTRAN, F. Verbs and Tenses in English. Craiova: Editura Contrafort, 2018. 101 p. ISBN 978-606-45-0071-7.

2. Articole în reviste științifice:

- PĂTRAN, F. Communicative Strategies In The Teaching Of Verbal Collocations. Studiu de specialitate. În: Studii de pedagogie diferențiată, anul 14/ 2017, nr. 23. Craiova: Editura Sitech, 2017, p. 50-52. ISSN 1584-5443.
- 2.2. PĂTRAN, F. Using Communicative Methods In The Teaching Of Interrogative Pronouns. Studiu de specialitate. În: Studii de pedagogie diferențiată, anul 14/2017, nr.
 23. Craiova: Editura Sitech, 2017, p. 47-49. ISSN 1584-5443.
- PĂTRAN, F. *Teaching Idioms Traditional Approach vs. Cognitive Approach*. Studiu de specialitate. În: Studii de pedagogie diferențiată, anul 14/ 2017, nr. 23. Craiova: Editura Sitech, 2017, p. 53-55. ISSN 1584-5443.
- 2.4. PĂTRAN, F. Particularitățile studierii limbajului specializat în domenii tehnice. În: Intertext, nr. 1/2 (49/50), anul 13, Chişinău, ULIM, 2019, p. 263-268. ISSN 1857-3711 / e- ISSN 2345-1750.
- PĂTRAN, F. Limbajele specializate versus stratificarea diastratică. În: Intertext, nr. 3/4 (51/52), anul 13, Chişinău, ULIM, 2019, p. 93-98. ISSN 1857-3711 / e- ISSN 2345-1750.

- 2.6. PĂTRAN, F. *Conceptualizarea metaforică și limbajul specializat din domeniul tehnic*.
 În: Inovație în Educație, nr. 5, Buftea, martie 2020, p. 450-451. ISSN 2668-7097.
- 2.7. PĂTRAN, F. Semantica terminologiei generale versus terminologia specifică (câmpul funcțional-semantic petrol). În: Intertext, nr. 3/4 (55/56), anul 14, Chişinău, ULIM, 2020, p. 63-68. ISSN 1857-3711 / e- ISSN 2345-1750.
- PĂTRAN, F. Functional-Semantic Features of the Lexicon in the Oil and Gas Field: Petrol Microfield. În: Speech and Context, nr. 2(XII), Universitatea de Stat "Alecu Russo" din Bălți, Republica Moldova, 2020, p. 26-32. ISSN 1857-4149.

3. Articole în lucrările conferințelor și altor manifestări științifice:

- 3.1. PĂTRAN, F. Challenging Speaking Abilities by Communicative Teaching Method. În: Simpozionul Internațional Educația Intergenerațională, ed. a III-a. În: Clepsidre, nr. 4, Vaslui, aprilie 2017, p. 21-24. ISSN 2360-4948.
- 3.2. PĂTRAN, F. Teaching and Learning Technical English. ESP and The Role of an ESP Teacher. În: Simpozionul Interjudețean Limbile moderne în context european, Târgu-Jiu, mai 2018. ISSN 2457-3825. <u>http://simpozion-Im.ecat.ro/?=392</u>.
- 3.3. PĂTRAN, F. Approaching Informal Learning in a Formal Environment. În: Simpozionul Județean Toma Becherete. Dascăli și destine în slujba școlii românești, ed. I, Târgu-Jiu, februarie 2019, p. 69-71. ISBN 978-973-0-30017-8.
- 3.4. PĂTRAN, F. Particularitățile terminologiei specifice versus terminologia generală. În: Simpozionul Internațional Comunicare Interculturală. În: Intercultural Education in European School, nr. 8/2019. Craiova: Ed. Else, p. 197-199. ISSN: 2285-1917.
- 3.5. PĂTRAN, F. Limbajele specializate versus stratificarea diastratică. În: Colloque International LA FRANCOPOLYPHONIE, XIV^e édition, Manifestations (inter)culturelles par la sémantique des langues-cultures, ULIM, Chişinău, mai 2019. <u>http://icfi.ulim.md/alltopics.php?cat=36.</u>
- 3.6. PĂTRAN, F. *Știința terminologiei versus terminologia specifică (câmpul funcțional-semantic "petrol")*. În: Conferința cu participare internațională: Complementaritatea traducerii și traducerea complementarității lingvo-culturale, ULIM, Chișinău, octombrie 2019. <u>http://icfi.ulim.md/alltopics.php?cat=36.</u>

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ADNOTARE

la teza de doctor în filologie a dnei PĂTRAN Florentina Studiu semantic și pragmantic al limbajelor specializate (Lexicul din domeniul industriei petroliere în limba engleză), specialitatea 621.05 - Semiotică; semantică; pragmatică (limba engleză), Universitatea Liberă Internațională din Moldova, Chișinău, 2021

Structura tezei. Prezenta cercetare cuprinde adnotări în limbile română, engleză și rusă, text de bază expus pe 183 de pagini format din introducere și patru capitole, concluzii generale și recomandări, bibliografie din 172 de titluri, 5 anexe, declarația privind asumarea răspunderii, CV-ul autorului.

Cuvinte-cheie: aspecte semantice și pragmatice, semnificant, semnificat, stratificare diastratică, ESP (Limba engleză pentru scopuri specifice), limbaj specializat, lexic specializat, limbaj comun, lexic comun, câmp functional-semantic general, câmp funcțional-semantic specializat, concept metasemic, transfer metasemic, metafore terminologice.

Domeniul de studiu: acoperă semiotica, semantica și pragmatica (engleză).

Scopul și obiectivele lucrării. Explorarea și investigarea limbajului specializat din perspectiva desemnării realităților din domeniul industriei petroliere; clasificarea lexicului în domeniul industriei petrolului în câmpuri și microcâmpuri funcțional - semantice; corelarea și analogia termenilor între diverse concepte referențiale care stau la baza metaforelor cognitive; cercetarea și descrierea semanticii unităților lexicale vizate în scopul identificării și determinării particularităților specifice și a modului de funcționare a lexicului specializat tehnic în corpusul selectat; stabilirea unor particularități ale limbajului specializat în conformitate cu câmpurile funcțional-semantice.

Noutatea și originalitatea științifică. Se propune completarea unei lacune existente privind lexicul specializat din domeniul petrolier la nivelul limbii române, prin elaborarea unui glosar de termeni ca expresie a problemei englezei pentru scopuri specifice (ESP). Se realizează completarea unui studiu comparativ-contrastiv privind dezvoltarea lexicului din domeniul petrolier la nivelul limbii române prin elaborarea unei investigații fundamentale a ESP din perspectiva desemnării metasemice a elementelor tehnice pe baza motivației, în lumina unor concepte de pragmatică și semantică generală, împreună cu o decodificare profesională a terminologiei din industria de petrol si gaze din diferite câmpuri funcțional-semantice. Se propune evidențierea trăsăturilor semantice și structurale unice ale englezei tehnice (TE), precum și unele interferențe lingvistice între limbajul general (GE) și cel specializat.

Rezultatul obținut care contribuie la soluționarea unei probleme științifice importante. S-a elaborat un glosar de lexic specializat din domeniul petrolier ca expresie a problemei ESP, care este studiată teoretic de pe poziția motivației apariției, existenței și utilizării sale, în primul rând în cadrul predării limbilor străine. Ținând cont că inginerii au nevoie de o engleză destinată necesităților și abilităților lor din domeniul tehnic, prezentăm o abordare analitică a unităților lexicale din perspectivă externă, urmărind identificarea și decodificarea corespondenței semantice și pragmatice între termenii din limba engleză și cei din limbajul specializat tehnic românesc.

Semnificația teoretică. Au fost determinate perspectivele asupra modului în care lexicul din domeniul industriei petroliere se dezvoltă alături de evoluția omului și a tehnicii; este urmărită corelația între lexicul general și cel specializat; sunt stabilite caracteristicile semantice și conceptuale ale lexicului specializat tehnic petrolier din cele două idiomuri.

Valoarea aplicativă a lucrării constă în posibilitatea de a aplica rezultatele cercetării în procesul folosirii lexicului din domeniul tehnic la elaborarea diferitelor lucrări sau suporturi didactice, manuale preuniversitare și universitare, destinate studierii limbii engleze pentru scopuri specifice și, în particular, la redactarea dicționarelor bilingve și explicative din industria petrolieră, precum și a unor cursuri speciale și opționale.

Implementarea rezultatelor științifice. Rezultatele cercetării și-au găsit reflectare într-un număr de 19 publicații și comunicări științifice, prezentate în cadrul unor conferințe naționale și internaționale.

АННОТАЦИЯ

к диссертации на соискание научной степени doctor в области филологии Флорентины Пэтран

Семантическое и прагматическое исследование специализированных языков (Лексика в области нефтяной промышленности на английском языке), специальность: 621.05 – Семиотика; семантика; прагматика, Universitatea Liberă Internațională din Moldova, Chisinău, 2021

Структура диссертации. Данная диссертация состоит из: аннотаций на румынском, английском и русском языках, текста диссертации изложенного на 183 страницах, состоящей из введения, четырех глав, общих выводов и рекомендаций, библиографии из 172 наименований, пяти приложений, декларации об ответственности, CV автора.

Ключевые слова: семантические и прагматические аспекты, семнификант, семнификат, диастратическая стратификация, ESP (Английский язык для специальных целей), специализированный язык, общий язык, общая лексика, общее функционально-семантическое поле, специализированное функционально-семантическое поле, метасемическая концепция, метасемический перенос смысла, терминологические метафоры.

Область исследования: английская семиотика, семантика, прагматика.

Цель работы: Исследование и изучение специализированного языка в области нефтяной промышленности; классификация лексики используемой в области нефтяной промышленности в функционально-семантические поля и микрополя; сопоставление и аналогия терминов между двумя референциальными концепциями, находящимися в основе познавательных метафор; исследование и описание семантики лексических единиц в целях идентификации и определения характеристик и способа функционирования технических терминов; выявление характеристик специализированного языка в соответствии с функционально-семантическими полями.

Научная новизна и оригинальность. В работе предлагается заполнение существующего пробела, относящегося к специализированной лексике на английском языке, используемой в нефтяной и газовой промышленности, на базе фундаментального исследования английского языка для специфических целей (ESP), исходя из перспективы метасемического обозначения технических элементов, из их мотивации, в свете прагматических и общесемантических концепций, одновременно с их профессиональной декодификацией в разных функционально-семантических полях; предлагается выявление уникальных семантических и структурных черт технического английского языка (TE), а также некоторые лингвистические интерференции между общим и специализированным языком.

Полученные результаты, способствующие решению важной научной проблемы. Был выработан словарь специализированной лексики, используемой в нефтяной промышленности, как выражение ESP, исследуемой теоретически с позиции мотивации появления, существования и использования данного специализированного языка, в первую очередь, в преподавании иностранных языков. Исходя из положения, что инженерам требуется английский язык, предназначенный необходимостям и навыкам применяемых в технической области, мы представляем аналитический анализ лексических единиц со внешней перспективы, исследуя идентификацию и декодификацию семантических и прагматических соотношений между английскими и румынскими терминами.

Теоретическое значение. Были определены перспективы способа, согласно которому лексика, используемая в нефтяной промышленности, развивается одновременно с развитием человека и техники; исследуется соотношение между общей и специализированной лексикой; определены семантические и концептуальные характеристики технической нефтяной терминологии в английском и румынском языках.

Практическая значимость данной работы состоит в возможности применении результатов исследования в процессе использования технической лексики для составления различных работ или учебных пособий доуниверситетского и университетского уровня, предназначенных для изучения английского языка в специальных целях, написания двуязычных и толковых словарей для нефтяной промышленности, а также для подготовки специализированных и опциональных курсов

Внедрение научных результатов. Результаты исследования нашли отражение в 19 научных публикациях и докладах, представленных в ряде национальных и интернациональных конференциях.

ANNOTATION to the PhD thesis in philology of Mrs. PĂTRAN Florentina Semantic and Pragmatic Study of Specialized Languages (English Lexicon for the Oil and Gas Industry), specialty 621.05 - Semiotics; Semantics; Pragmatics (English), Free International University of Moldova, Chişinău, 2021

Thesis structure. This research includes annotation in Romanian, English and Russian, 183 pages basic text, consisting of an introduction and four chapters, general conclusions and recommendations, bibliography with 172 titles, five annexes, assumption of responsibility, curriculum vitae.

Keywords: semantic and pragmatic aspects, signifier and signified, diastratic stratification, ESP (English for Specific Purposes), specialized language, specialized lexicon, general language, general lexicon, general functional-semantic field, specialized functional-semantic field, metasemic concept, metasemic transfer, terminological metaphors.

The field of study covers semiotics, semantics and pragmatics (English).

Purpose and objectives of the thesis. Exploration and investigation of the Specialized Language from the perspective of designating realities in the of oil and gas field; classifying the lexicon from the oil field into functional-semantic fields and microfields; correlation and analogy of the terms between various referential concepts underlying the cognitive metaphors; researching and describing the semantics of lexical units concerned in order to identify and determine the specific particularities and the way the technical lexicon function in the selected corpus; establishing some characteristics of the Specialized Language according to functional-semantic fields.

Scientific novelty and originality: It is proposed to fill in a current gap regarding the Specialized Language from the oil and gas field at the level of Romanian language by developing a glossary of terms as an expression of the *English for Specific Purposes* (ESP) problem; it is carried out a comparative-contrastive study on the development of the lexicon in the petroleum field at the level of Romanian language by conducting a fundamental investigation on the ESP from the perspective of metasemic designation of the technical elements based on motivation, in the light of some general pragmatic and semantics concepts, together with a professional decoding of the oil and gas industry terminology from different functional-semantic fields. It is proposed to highlight the unique semantic and structural features of the Technical English (TE), as well as some linguistic interferences between General Language (GE) and specialized one.

The result obtained that contributes to solving an important scientific problem. A glossary of specialized lexicon in the oil and gas field has been developed as an expression of the ESP problem, which is theoretically studied in terms of its motivation, occurence, existence and use, first of all within the foreign languages teaching. Given the fact that engineers need an English designated to their technical needs and skills, we present an analytical approach of the lexical units from an external perspective, following the identification and decoding of the semantic and pragmatic correspondence between English terms and those in the specialized Romanian technical language.

Theoretical significance. There have been determined the perspectives on how the lexicon from petroleum industry field is developing along with the evolution of human being and technology; the correlation between General and Specialized Lexicon is followed; the semantic and conceptual characteristics of the oil and gas industry technical lexicon of the two idioms are set.

The applicative value of the paper represents the possibility of applying the results of the research in the process of using the technical lexicon for preparing different pre-university and university papers or textbooks for studying *English for Specific Purposes* and, in particular, for writing bilingual and general dictionaries in the oil and gas industry, as well as to elaborate some specific and optional courses.

Implementation of scientific results. The results of the research have been reflected on a number of 19 scientific articles and works presented within national and international conferences.

FREE INTERNATIONAL UNIVERSITY OF MOLDOVA

PĂTRAN Florentina

SEMANTIC AND PRAGMATIC STUDY OF SPECIALIZED LANGUAGES (ENGLISH LEXICON FOR THE OIL AND GAS INDUSTRY)

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ABSTRACT of the Phd thesis in philology

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