Толчеева Т. С. Прикладная методика создания артефактов фармацевтического нейминга.

В статье рассмотрена сущность коммерческой номинации как основного направления современной лингвопиарологии; определено содержание понятия "нейминг", в основу которого положен креативный процесс коммерческой номинации в целом; предложено определение фармацевтического нейминга; разработана прикладная методика создания артефактов (денотативных наименований) фармацевтического нейминга, включающая такие методы, как нейролингвистическое программирование (базируется на методе семантического дифференциала, что позволяет выявить эмоциональное отношение потребителей к продукту и его имени, определить потенциальные риски для фармацевтического бренда); лингвистические рекламные технологии, пресуппозиции и современное словообразование (комбинации различных способов и средств словообразования, преимущественно аббревиации и словосложения).

***Ключевые слова**: коммерческая номинация, лингвопиарология, фармацевтический нейминг, артефакты.*

Tolcheeva T. S. Applied Methodology for Creating Artefacts of Pharmaceutical Naming.

The essence of commercial nomination as the main trend of modern linguopiarology has been considered in the article. The content of the concept of "naming" has been determined, which is based on the creative process of commercial nomination in general. The definition of pharmaceutical naming has been proposed. An applied methodology for creating artefacts (denotative names) of pharmaceutical naming that includes such methods as neurolinguistics programming (based on the semantic differential method, which enables to identify the emotional attitude of consumers towards the drug and its name; identify certain risks for the pharmaceutical brand); linguistic advertising technologies, presuppositions and modern word-formation (combinations of different ways and means of word formation, mainly abbreviations and word-building) have been developed.

***Keywords**: commercial nomination, linguopiarology, pharmaceutical naming, artefacts.*

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KERNEL (SUBORDINATING) MODELS OF VERBAL WORD-PHRASES IN THE TEXTS "RADIO-ELECTRONICS"

The paper presents the results obtained in the course of researching the text corpus "Radio-Electronics". It (research) was carried out with the view of compiling a list of kernel (subordinating) models of verbal word-phrase possessing the statistically reliable characteristics to introduce them later in methodological and lexicographical literature intended for the future Radio engineers learning the English language. The text corpus was formed by the method of continuous sampling. It is based on the scientific articles published in the journals of the corresponding specialty.

***Keywords:** dependence, model, compatibility, prevalence, frequency.*

A characteristic feature of modern linguistic science is a growing demand for the results of theoretical research with a view to their immediate implementation in applied linguistics. The consequence of such a synthesis manifested in the improvement of English language teaching methods for foreign language students, and, in particular, in a radical change in the content of instructional lexicographical resources. An example is the use of the results of the analysis of combinatory ties within word-phrases that make it possible to record for memorizing the whole phrases rather than individual words [1; 4; 6; 10; 11; 19; 20], which contributes to more rapid development of oral speech. It is safe to say that the

listed books are based on real linguistic analysis of the relevant texts, since they provide statistics on the frequency of using word-combinations intended for acquisition.

It appears that the subject of colloquial English has already been provided well enough with methodologically reliable literature, the number of which keeps growing. Besides the above-mentioned textbooks, one can specify the works aimed at improving the compatibility dictionaries on the basis of the selection of the existing ones [9; 12; 14]. However, as regards such a side of society as the scientific, technical and industrial activity of man and, therefore, the training of future engineers in English for Specific Purposes, it is covered in the existing publications to a much lesser extent [13; 18]. The reason for this is, above all, an insufficient number of generalising linguistic facts, which would help to create the necessary basis for methodological literature for teaching English at Technical Universities. Therefore, there is now a definite rise in the theoretical studies dealing with patterns of compatibility of linguistic units in the texts of scientific functional style [5; 16; 17], and providing their findings for problem solving in the areas of applied linguistics.

It is from these positions that the theoretical linguistics research of the authors of the present paper is being carried out. Working at the department of foreign languages in non-linguistic (technical) higher educational institution where the main purpose of the curriculum is to teach students, residents of Ukraine, English for Specific Purposes (i.e. reading, translation, listening and speaking skills in technical areas of knowledge), the authors believe that only the results of the independent theoretical research of the units operating in authentic scientific and technical texts should be used in the English teaching process.

Since, as it was mentioned, training dictionaries, containing word-phrases but not individual words, are becoming more and more popular, the study of combinability (combinatorics), i.e. the realization of the potential of different speech units to obligatorily attach other elements of the text, is topical and timely.

So we can say that this paper is at the intersection of the two different disciplines, namely methodology of English teaching and theoretical linguistics that interact on the basis of mutual exchange of problems and results.

At the initial stage of the linguistic research, it was decided to consider such a significant word class in the language system as the verb and its combinatorial properties, reflected in scientific and technical discourse.

The goal of the paper is to describe the results of the initial stage of the research, which are preparatory and devoted to the formation of the statistically reliable inventory (list) of word-phrases, called the kernel models of verbal subordinating word-phrases in the paper, for their further presentation in instructional literature. The kernel models were distinguished from the text corpus "Radio-Electronics" according to the principles expounded in p. II A.

The following tasks were performed to achieve the goal of the paper:

– a text corpus "Radio-Electronics" was created;

– a frequency (F) list of the verbs selected on the basis only of subordinating (kernel) bonds was compiled;

– the major theoretical problems concerning verbal combinability and formation principles of patterns of verbal word-phrases were analyzed in order to form then the list of kernel models of verbal subordinating word-groups;

– an inventory of all verbal combinability models (kernel models of verbal subordinating word-groups) with the most frequent verbs as the kernels found in the text corpus "Radio-Electronics" was created;

– the comparison of the obtained inventory of models to the ones already existing in the available literature was made in order to identify the presence or absence of differences in amount and contents;

– the list of verbal combinability models was ordered by frequency to highlight the most frequent ones;

– statistical analysis of the list of the verbal combinability models (kernel models of verbal subordinating word-groups) was carried out to classify the models as to their prevalence, which allows for the correlation between the frequency of the model and the quantity of the involved verbs to be traced, as well as between the frequency of the model and its location in the various parts of the inventory (list); between the frequency of the model and its simplicity or complexity;

– the most frequently used verbs were grouped as to the number of models in which verbs appear as the kernels.

As the material of the study we have chosen the sublanguage “Radio-Electronics”, which is an integral part of the scientific discourse. When choosing a sublanguage of this area of knowledge, we were guided by the fact that the industry "Radio-Electronics” is one of the most promising and rapidly developing fields of science and engineering, with an enormous amount of information being published on its achievements in English. For example, there is hardly a sphere in modern society that can do without electronics, including such an important for everyone sector as domestic appliances as well. For the future engineers to get the access to the most important collections of the world scientific and technical literature, to timely receive the necessary information, as well as be able to communicate with foreign colleagues at conferences and workshops, we need to use accurate and proven linguistic facts in the instructional work, which are reflected in the scientific texts on specialty “Radio-Electronics”. Thus, the results of research on the material of “Radio-Electronics” text corpus described in this paper create the necessary prerequisites for the further improvement of a technique for English teaching the future specialists in Electronics.

The text corpus was formed by the method of continuous sampling. The basis of the text corpora were scientific and technical journals “Radio-Electronics” published in the United States and Great Britain.

In the course of forming the “Radio-Electronics” text corpus the texts, titles and abstracts to the papers composed and written by different authors were subjected to quantitative processing. In addition, the captions to drawings, diagrams and graphs were examined. The survey did not cover advertisements and commercials; neither equations nor formulas were taken into account. We recorded all autonomous verbs in any form and syntactic function (other than *to be* and *to have*, and verbs with postpositions such as “put up”).

So from the text corpus “Radio-Electronics” 25788 verbs were singled out. This total amount included 1558 different verbs, with their percentage in the text totality being 12.9%. On arranging the different verbs in descending frequency order, we have compiled the frequency list of the verbs of the “Radio-Electronics” sublanguage. From this frequency list of verbal lexemes those having the frequency (F) of 100 or higher were selected for the further study of combinatory properties of verbs. The list of the most frequent verbs, which form the basis for kernel verbal models, contains 52 units: *use* (F = 1291), *make (*F = 518), *show* (F = 500), *see* (F = 339), *check* (F = 324), *connect* (F = 303), *get* (F = 303), *operate* (F= 283), *work* (F = 269), *find* (F = 262), *go* (F = 254), *do* (F = 231), *provide* (F = 205), *apply* (F = 205), *need* (F = 205), *give* (F = 198), *take* (F = 195), *require* (F = 189), *set* (F = 183), *record* (F = 182), *read* (F = 176), *cause* (F = 165), *produce* (F = 160), *know*

(F = 158), *look* (F = 157), *mount* (F = 156), *increase* (F = 145), *reduce* (F = 143), *determine* (F = 138), *start* (F = 137), *tune* (F = 133), *add* (F = 131), *change* (F = 129), *develop* (F = 128), *measure* (F = 127), *adjust* (F = 123), *replace* (F = 122), *want* (F = 122), *build* (F = 121), *control* (F = 121), *flow* (F = 121), *include* (F = 120), *note* (F = 120), *design* (F = 113), *say* (F = 112), *come* (F = 109), *test* (F = 108), *call* (F = 107), *try* (F = 196), *short* (F = 104), *switch* (F = 104).

So, we present the most frequent verbs of the text corpus "Radio-Electronics", which first of all should be learned by students in the practice of studying English. In the paper they will be considered as the verbs-kernals of models.

To create a list of verbal word-phases with these verbs as kernels we need to consider the problem of valence (the ability of a word to enter into connections with the other language units) and combinatorics (realization of this ability in speech), i.e. interaction of language and speech, from theoretical positions.

It should be noted that the verb, as any other unit of language, possesses an inherent property of valence, since each verb has the property of selectivity towards its dependent elements and, in accordance with this property, is combined not with any subject, object, etc. [7]. For example, Helbig realizes this peculiarity to take into account the selective valence properties of the verb in compiling the "Dictionary of valence and distribution of German verbs", which provides a brief qualitative characteristic of indispensible verbal ties [8]. Thus, it is one of the examples when the theoretical study of the concept of syntactic valence finds a way into practice for the needs of lexicography and language teaching.

The most difficult and important thing to construct the verbal word-phrases is the question of the verbal environment volume which is determined by valence, because you need to know which words can and should be included in it, and which can and should be omitted. Description of the valence of a word is carried out by modeling its potential combinatorial properties. The unit of language representing some valence property of a word is a model (pattern). Here we mean a formula consisting of classes of words and reflecting a certain type of relationships between these classes of words and the structure of actually existing combination of words [18].

Thus, in this paper we adopt such understanding of combinatorics when the grammatical valence of the verb determining its property to enter into definite connections and form combinations with other classes of words is described by a set of models (patterns).

Another important issue in combinatorics is the nature of bonds between the elements of a model, since in selecting the verbal word-phrases it is necessary to distinguish those, which are in the dependent position as regard to the verb. Such methods of connecting words like grammatical agreement, verbal government and parataxis are distinguished [3].

There is yet another approach to defining the relationships of words in a sentence, as determined by the nature of relations between the related words, namely: interdependency, a one-sided dependence (determination) and constellation, based on which subordinating, coordinative and predicative relations shall be established, respectively [2].

Subordinating connections are characterized by the irregularity (non-uniformity) of their constituent units, i.e. dependence of one of the components from another, and are divided into kernel and adjunct ones depending on the analyzed word status - active or dependent. For example, in the sentence *Every machine includes a cassette flipout button* we observe the kernel connection for the verb *includes*, which governs the noun *button*, for which the words *cassette* and *flipout* are subordinate. We also see the adjunct connection for the words *every*, which is dependent on the noun *machine*, and *button*, which is subordinated to the word *includes*, as well as the words *flipout* and *cassette*, which depend on the word

button. Thus, within the framework of verbal word-groups every verb is in subordinating relations with the word-group components dependent on it (a verb), and has a certain number of subordinating grammatical ties.

Coordinative bond is characterized by the absence of any domination between grammatically related words. Predicative connection is the interdependence existing between the subject and predicate. Since we have chosen subordinating connection to describe the relations of verbs, we will not dwell on the characteristics of coordinative and predicative relations.

And one more remark. It is possible to distinguish the connections of words in the models as grammatical and lexical-grammatical ones. The former records only the presence of the grammatical connection between elements of a combination, disregarding the possibility / impossibility for an element to be a communicative or nominative unit of the language. The latter involves the formation of a completed word-group, which can be regarded as a unit of communication. For example, in the sentence *They operate the device heavily* grammatical relations are recorded in the following combination: *They operate* (predicative), *operate the device*, *operate heavily* (subordinating). The completed word-phrases are only two of them – *They operate* and *operate the device,* which are formed according to the models (patterns) of completed word-phrases and can be used in the course of communication as a unit, which is apprehensible without any extra elements. In our paper we indicated the relations of verbs, which form the completed word-phrases exclusively.

It should be noted that besides the theoretical conclusions about the need for research of exactly the kernal bonds, there is empirical evidence that connections of this type play a key role in combinatorics of the English verb, because it is characteristic for the verb, in the first place, to be the main, governing component of the construction, and only in the second place to enter the connections of other types. Evidence for this is contained in a number of studies which have confirmed that kernal bonds are reflected in the valence of the verb with the highest frequency [2; 15].

Thus after the theoretical substantiation of choosing the kernel models of the subordinating verbal word-phrases as the subject of the paper, these syntactic units have been used to describe the combinatorial features of the 52 most frequent verbs functioning in the text corpus “Radio-Electronics”.

To form the inventory of verbal combinability models the distributional analysis of 10698 sentences was carried out, in which both contact and distant elements but obligatorily connected to the verb with the help of grammar (subordinating) bond were taken into consideration.

The inventory list includes 53 kernel verbal combinability models. Grammatical relations of the verbs with the surrounding elements were expressed in terms of classes of words which are denoted with the help of conventional markers: V0 – a verb that has no subordinating bonds, N – noun, A – adjective, D – adverb, adverbial modifier, V= – infinitive, Ving – Participle I, Ven – Participle II, S – verb-dependent subordinating clause, which in our case can be considered as a word class, prp – preposition, cnj – conjunction.

To prove the presented data reliability some statistical procedures were made. They are the following: frequency (F) characteristic indication; calculation of verbal word-group models prevalence; placement of the kernel verbal models around the list; the identification of interdependence between the frequency of occurrence of a model and its simplicity / complexity.

Table 1 demonstrates the results of the frequency (F) characteristic indication. The corresponding examples illustrating the most frequent kernel models are given after the table.

Table 1

Frequency Characteristics of the Kernel Modelsof Verbal Word-Phrases Functioning in the Text Corpus "Radio-Electronics"

№	*Types of Models*	*Frequency, F*	*№*	*Types of Models*	*Frequency, F*
1.	VN	7730	27.	VAS	10
2.	VNprpN	2844	28.	VNNV=	9
3.	VprpN	1036	29.	asVenD	7
4.	VND	944	30.	Vlike/as/cnj/Ven	6
5.	V0	914	31.	VNlike/as/cnj/A	6
6.	VNV=	715	32.	VNND	4
7.	VD	500	33.	VNlike/as/cnj/V	4
8.	VS	422	34.	VprpNV=	4
9.	VNN	252	35.	VprpNasN	3
10.	VNprpVing	217	36.	VNDprpN	3
11.	VNS	200	37.	V/like/as/cnj/A	3
12.	VNA	180	38.	VNNS	2
13.	VV=	160	39.	VNAV=	2
14.	VNlike/as/cnj/N	135	40.	VSprpN	2
15.	VA	107	41.	VprpNVen	2
16.	asVenprpN	58	42.	VAD	1
17.	VNVing	55	43.	Vlike/as/cnj/Ving	1
18.	VprpNprpN	48	44.	VNNVing	1
19.	VNlike/as/cnj/Ving	33	45.	VNAD	1
20.	Vlike/as/cnj/N	32	46.	VNAVing	1
21.	VVing	29	47.	VNAS	1
22.	VNVen	24	48.	VNlike/as/cnj/D	1
23.	VNlike/as/cnj/Ven	23	49.	VAprpN	1
24.	VprpVing	17	50.	VDprpN	1
25.	VDV=	16	51.	VNNprpN	1
26.	VVen	13	52.	VNas/prpN	1
			53.	VprpNprpNVing	1

1. V0 – simple questions to answer; sensitive to detune [21]
2. VN – investigate the possibility [23]; use a module [21].
3. VA – operate satisfactory [21].
4. VD – achieves much better [23]; improve greatly [28] .
5. VV= – different methods […] proposed to mitigate GPS jamming [27]; comes to overall product assembly [21].
6. VVing – avoid updating [29]; IoT devices end up pursuing this route [21].
7. VVen – get lost [30].
8. VS – experiments demonstrated that the proposed method [25];
9. results show that the VSWR is more than 8:1 [26].
10. VNN – make an external antenna a necessity [21].
11. VNA – gives results order faster [24]; make the overall device design less practical [21].
12. VND – they follow the layout guidelines correctly [21].
13. VNV= – work […] with RTOS vendors to ensure [30].
14. VNVing – propose a transmit-diversity system using a pair of orthogonal
15. pulses.
16. VNVen – find it listed [30].

17. VNS – reflect […] the fact that a wider number of RTOS vendors [30].

The next statistical characteristic, which is necessarily considered in the paper for proving the statistical reliability of the kernel models, is prevalence. The prevalence indication allows to trace the interrelation between frequency of a model and the number of verbs involved in it, i.e. the number of various verbs used as kernels in models is an indicator of their prevalence.

In accordance with the principle of prevalence all the analyzed models were divided into the following groups: the models with very high index of prevalence; the models with the high prevalence; the models with the mean index of prevalence; the models with low prevalence; the models with very low prevalence. The intervals of prevalence for each of the groups of models were determined by dividing the largest number of verbs registered in the models into five as to the number of groups. Thus 51:5=10.2. So the models of the first group enter the interval of prevalence as to the number of verbs from 51 to 40.8; the second group – from 40.8 to 30.6; the third group – from 30.4 to 20.4; the forth group – from 20.4 to 10.2; the fifth group – from 10.2 to 1.

1. The group of models having a very high index of prevalence (6 models) – VN, VND, VNV=, VD, VNprpN, V0;
2. The group of models of high prevalence (3 models) – VprpN, VNS, VNprpVing;
3. The group of models with the mean index of prevalence (3 models) – VS, VNN, VNVing;
4. The group of models of low prevalence (4 model) – VV=, VNlike/as/cnj/N, VNlike/as/cnj/Ving, VprpNprpN;
5. The group of models of very low prevalence (37 models) – VA, VVing, VVen, VNVen, VNA, VprpVing, VDV=, VNasV, VAS, Vlike/as/cnj/N, Vlike/as/cnj/Ven, Vlike/as/cnj/A, AsVenD, VAD, Vlike/as/cnj/Ving, VprpNV=, VNlike/as/cnj/A, VNlike/as/cnj/Ven, VNND, VDprpN, VNNV=, AsVenprpN, VSprpN, VNAV=, VNAVing, VNNVing, VprpNVen, VNAD, VNNS, VNasD, VNAS, VNDprpN, VAprpN, VprpVasN, VNNprpN, VNas/prpN, VprpNprpNVing.

The given classification shows that only 11 models, which are 20.3% of the entire model inventory, enter the first three groups. The rest 42 models make up 79.7% of the list of models and are included in the groups with the low and very low indexes of prevalence.

In correlating the frequency of usage and degree of prevalence of the models we can see, that these two characteristics are interrelated, and the higher the frequency of the model usage, the higher the index of prevalence. So the direct dependence between the frequency of models and their prevalence can be observed. For example, the models VN, NprpN, VND have high indexes as to both frequency and prevalence. The model VN having the total frequency equal 7730, is used with 51 verbs, the model NprpN, having the total frequency equal 2844 – with 49 verbs, and the model VND, whose total frequency is 944, is characteristic for 48 verbs.

However, in some individual cases the indexes as to these features diverge. For example, in forming the model VprpN (total frequency 1036) only 39 verbs participate while in less frequency models VND (total frequency 944) and V0 (total frequency 914) there are 48 and 43 verbs, respectively. The model VNVing is also an exception because in spite of its having quite low total frequency of occurrence (only 55) it enters the group of models with the mean index of prevalence; on the other hand, the model VNA (total frequency 180) is included in the group of models with very low index of prevalence but as to the frequency of usage may be referred to the models with the mean index of frequency.

Despite these discrepancies, it is obvious that the difference in the numerical values in such cases is not very high, and we can say that the most high-frequency models are also the most prevalent ones.

On the basis of data on the frequency of the models in question, one can distinguish a functional centre, main and peripheral subsystems of the kernel models.

To the centre of the described models we will attribute the ones that make up 68-70% of the material investigated. To determine the main subsystem, we introduce 95% significance level, and the rest of the models are the units of the peripheral subsystem. From this perspective we will analyze the entire inventory of models.

The total frequency of the 53 verbal kernel models is 16803. Twelve of them are used with total frequency, which is 95% of 16803. They create the main subsystem of the kernel models of verbal combinability. They are: VN (F = 7730), VNprpN (F = 2844), VprpN (F = 1036), VNS (F = 944), V0 (F = 914), VNV (F = 715), VD (F = 500), VS (F = 422), VNN (F = 252), VNprpVing (F = 217), VNS (F = 200), VNA (F = 180). Three of these models, the total frequency (11610) of which is 69% of the value 16803 can be called a functional centre of the list of models. The models VN, VNprpN, VprpN are included there. The rest 41 models do not enter the functional centre and are referred to different parts of the peripheral area depending on the frequency of usage.

Along with the determination of interdependence between the frequency of the model usage and the degree of its prevalence one more research was carried out, which allowed, using the rank correlation method, to identify another type of dependence, namely, the interdependence between the frequency of occurrence of a model and its simplicity/complexity. The results of the analysis showed that the direct dependence between the frequency of usage of a model and its simplicity/complexity does exist: the simpler the models, the higher the frequency of their usage.

So the results of statistical procedures show that only 11 models can be used for the future research for the probable usage in the methodological literature (the model VNA was also included as its frequency is high enough). They make up the basic subsystem of the kernel verbal models as they are the most frequently used ones and possess all the necessary statistical characteristics: high prevalence, simplicity, and belong to the functional center of the model list. They reflect the most characteristic combinability features of the analyzed verbs, i.e. they are considered to be typical (the model V0, though enters the basic subsystem, was excluded from the analysis: it specifies the absence of subordinating bonds, that is why it is not of great interest for researching).

After the 11 standard models have been marked out of the entire inventory of verbal compatibility models (kernel models of verbal subordinating word-phrases), the analysis of the most frequently use verbs represented previously, forming the kernals of these models were analyzed with the view to indicate the quantitative interdependence of the verbs and models, i.e. the verbs were grouped according to the amount of models they are used in. These statistical data can be used further in indicating semantic features of elements inside each of the models.

Let us see how the verbs function within the 11 allocated typical models in the real text corpus. Taking into account the amount of various typical models characterizing each of the verbs we can obtain a classification of verbs as to the amount of models. The table below demonstrates the quantitative distribution of models as to the verbs peculiar for them, and groups of verbs placed as to the amount of typical models.

Table 2

Correlation of Verbs-Kernals and Models

Amount of Models	***Amount of Verbs***	***Verbs***
11	2	find, set
10	5	check, make, read, see, show
9	13	add, build, change, connect, develop, do, get, give, increase, mount, operate, replace, start
8	8	apply, cause, determine, know, measure, switch, take, tune
7	11	adjust, come, feed, go, produce, provide, record, reduce, require, try, use
6	8	call, look, need, note, say, short, want, work
5	3	control, design, test
3	1	flow
2	1	include

As we see from Table II only two verbs *find* and *set* are completely realized in all the 11 models. The minimal number of models (just 2) are related with the verb *include*. None of the verbs has one model.

So, in order to ensure the educational process when teaching the subject "English for Specific Purposes" with reliable, in terms of linguistic statistics, teaching materials, the scientific study of the text corpus of technical sublanguage "Radio-Electronics" was carried out. The study results showed the following:

1. A list of 52 most frequent verbs, i.e. the verbs-kernels, were formed, which are the basis for the verbal word-phrases models.
2. In analyzing the text corpus of the technical sublanguage "Radio-Electronics" a list of the kernel models of verbal subordinating word-phrases was created. It includes 53 units.
3. From the list of verbal word-phrase models 11 most frequent models with very high, high and mean prevalence rates were selected. They occupy the centre of the described list of models. In addition, the check with the help of rank correlation method confirmed that the most frequent models are both the simplest. The statistical characteristics allowed to define these models to be of primary importance for use in textbooks intended for English oral speech teaching.
4. We also used the list of the verbs-kernels possessing the highest statistical parameters in order to find out how these models are distributed among the verbal lexemes having the frequency 100 or higher and forming the list of verbs-kernals for the models. The results of combination of the two frequency lists showed that two verbs *find* and *set* are realized in all the models, and the only verb functioning in the minimal amount of models (only 2) is the verb *include*.
5. In the course of researching the authors indicated that the 11 most frequent verbal word-phrases occupy 20.3% of the entire inventory of models. The rest 42 kernel models with the frequency less than 180 make up 79.7% (i.e. almost 80 %) of the entire list of models, i.e. they represent a significant, as to their amount, set of models. They are of certain interest both for training goals and the future theoretical research.

The future research will be devoted to the analysis of lexical characteristics of verbs and their (lexical characteristics) probable dependence both on the amount of lexemes presented in them and statistical parameters they possess.

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Шапа Л. М., Кудінова Т. І. Ядерні (підрядні) моделі дієслівних словосполучень у текстах "Радіоелектроніка".

Стаття містить результати дослідження англійського текстового корпусу "Радіоелектроніка", яке було проведено з метою укладання списку ядерних (підрядних) моделей дієслівних словосполучень зі статистично надійними характеристиками для їх подальшого введення в методичну і лексикографічну літературу, призначену для майбутніх інженерів-фахівців із радіоелектроніки, які вивчають англійську мову. Текстовий корпус сформований методом суцільної вибірки і заснований на наукових журнальних статтях спеціальності "Радіоелектроніка". Для отримання інвентарю моделей дієслівної сполучуваності було проведено дистрибутивний аналіз 10698 речень. При цьому враховувалися як контактні, так і дистанційні елементи, що входять до сфери граматичних (підрядних) зв'язків дієслова.

Ключові слова: *залежність, модель, сполучуваність, поширеність, частота.*

Шапа Л. Н., Кудинова Т. И. Ядерные (подчинительные) модели глагольных словосочетаний в текстах "Радиоэлектроника".

Статья представляет результаты исследования английского текстового корпуса "Радиоэлектроника", которое было проведено с целью создания списка ядерных (подчинительных) моделей глагольных словосочетаний, обладающих статистически надежными характеристиками, для их дальнейшего введения в методическую и лекикографическую литературу, предназначенную для будущих инженеров-специалистов по радиоэлектронике, изучающих английский язык. Текстовый корпус сформирован методом сплошной выборки и основан на научных журнальных статьях специальности "Радиоэлектроника". Для получения инвентаря моделей глагольной сочетаемости был проведен дистрибутивный анализ 10698 предложений. При этом учитывались как контактные, так и дистанционные элементы, входящие в сферу грамматических (подчинительных) связей глагола.

Ключевые слова: *зависимость, модель, сочетаемость, распространенность, частота.*