# MORPHONOLOGICAL UNITS IN THE SYSTEM OF UKRAINIAN WORD-FORMATION FROM THE NOUN

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### **INTRODUCTION**

1931 is considered to be the year of the formation of a new linguistic discipline – morphonology, in the history of a linguistic science. In the very year, a programme article, written by M. S. Trubetskoy, "Gedanken über Morphonologie" was published in the "Travaux de Cercle Linguistique de Praque", No. 4. Defining morphonology as a science of the principles of a morphological use of the language phonological means, he identified three aspects of each and outlined the tasks of each of them. Three years later, in the work "Das morphonologische System der russischen Sprache", the scientist proposed a model of applying his model of morphonology to the analysis of the morphonological facts of a particular language.

The works of M. S. Trubetskoy became a kind of summary of the searches and achievements in this area of linguistics for many generations of the researchers. After all, the question of the compatibility of sounds and their mutual influences were analysed by the authors of ancient Indian grammars. In particular, Panini in his "Vosmyknyzhya" / "Eight Books", paid a considerable attention to the analysis of the equivalents of the modern morphonological transformations to the phenomena of sandhi (ie, the changes in sounds at the morphemic sutures and on the verge of words) and vrdhi and hunas (the alternation of vowels in the roots). Therefore, the topicality of the morphonological patterns for grammar was already understood by the researchers.

All morphological problems, discussed since M. S. Trubetskoy period, can be grouped into two groups: 1) the general theoretical problems of morphology; 2) the problems analysis of the morphonological systems of languages with a high degree of phenomena activity of the morphemes formal modification by their combination in the processes of word-change and word-formation. In the list of the first are the most relevant issues on the status of morphonology and its units, the classification of the automatic (due to the existing phonetic laws) alternations, the correlation / incompatibility of the morphonological transformations with the plan of a language content and the presence / absence of isomorphology among the morphonological phenomena of word-change and word-formation.

Modern researchers of morphonology are unanimous in the opinion on the expediency of distinguishing the morphonology of word-change and word-formation in view of the specific nature of the rules and patterns inherent in them. The provisions on the functional significance of the transformation means of the plan of expression of morphemes, their correlation with certain morphonological or word-formation categories and rules, nowadays, also do not raise any admonition. The matter looks different with the first two questions. Some researchers consider only phonemic (historical, morphonological) alternation to be the object of morphonology, while the others consider both variants of alternations within morphonology. Equally debatable is the question of the appropriateness of morphonology units distinguishing, especially taking into account its intermediate status in the level organization of a language. But even the supporters of a positive solution to it do not illustrate any unanimity. Some of them consider it advisable to distinguish two morphonological units – a morphoneme and a sub-morph (intermorph), the others – only one of them.

The analysis of the morphonological phenomena in the system word-formation from the Noun, the study of the morphonological structure of all morphonological types of non-substantive word-formation nests convinced us of the opinion on the special character of the morphonological level of a language. It is not only intermediate (at which there takes place the transition from the insignificant linguistic entities to the significant ones), but also independent (it may refer to a system of new relations). The so-called independence of morphonology gives grounds for justification and selection of the morphonological units, in particular in the sub-system of the word-formation from the Noun.

# From the history of distinguishing and analysis of the morphonological units

With the singling out of the morphonological issues into an independent field of linguistics, in the linguistic literature the discussion began on the expediency of allocating morphonemes and sub-morphs (or interfixes) as morphonological units. O. S. Akhmanova, G. Aronson, S. B. Bernstein, O. S. Kubriakova, E. A. Makayev, L. Pysarek, T. V. Popova, O. O. Reformatskyi convinced that morphonology, as a doctrine of the phonological representation regularities of morphemes and their rows, does not need a special unit: all cases of the morphemes formal variation, in their opinion, can be adequately described in terms of alternations. T. V. Bulyhina, D. S. Wort, V. B. Kasevych, K. Kovalik, V. V. Lopatin, R. Laskowski, S. M. Tolstaya, M. S. Trubetskoy, Z. Harris, V. H. Churhanova, on the contrary, substantiated the linguistic reality of the

morphological units, their importance for the correct description of languages with a high activity of the morphological phenomena.

Both approaches have the supporters and the opponents among the current researchers of morphonology. Thus, N. I. Danilina, investigating the morphonological systems of non-related languages (classical, Germanic, Slavic, and finding the relation among them in synchrony and diachrony, refuses to use the term "morphoneme". In her opinion, in "any of its meanings it has the correct alternative nominations". The term "morphoneme" is not used by S. Zdziebko in the analysis of the consonant morphonology of the Polish language<sup>2</sup>. Describing the morphological level of the language synthesis model, I. B. Itkin, on the contrary, uses the term and the concept of "morphoneme", instead he considers it to be inappropriate in the concept of "sub-morph". In the work of O. I. Antypov on the problems of Russian dialect morphonology, the term "morphoneme" is not represented, but the author used the term "sub-morph".

Using the concept and the term "morphoneme", the representatives of different linguistic schools and areas do not demonstrate a unified view of a morphoneme as a distinct linguistic phenomenon. The Polish scientist H. Ulaszyn, who introduced this term, understood it as a phoneme in the semasiological-morphological function<sup>5</sup>, that is, as an elementary component of the morph, undergoing the alternation within the morpheme. In the spirit of H. Ulaszyn's ideas, Russian researcher V. H. Churhanova formulated the concept of a morphoneme as an elementary unit of morphonology: a morphoneme is a unit that reflects the unity of the strong (it is represented by a phonemic series with a strong phoneme) and the weak (a phonemic series without a strong phoneme, for example,  $\{o\}$  in the first syllable of the Russian word  $\kappa opo oa$  (a cow)) phonemes of one class, interpreted as a component of a real morpheme (morph)<sup>6</sup>.

M. S. Trubetskoy, a contemporary of H. Ulaszyn, based his vision of morphonemy on J. Baudouin de Courtenay's thought of "he homogeneous phonemes that arose from a single phoneme": it is "a complex image of two or more phonemes that can, in accordance with the conditions of the

<sup>&</sup>lt;sup>1</sup> Данилина Н. И. Морфонологические системы в синхронии и диахронии (на материале неблизкородственных языков) : автореф. дис. ... докт. филол. наук : специальность 10.02.19. Саратов, 2012. С. 11.

<sup>&</sup>lt;sup>2</sup> Zdziebko S. Modelling morpho-phonology: consonant replacements in Polish. *Studies in Polish Linguistics*. 2012. № 7. C. 129–164.

<sup>&</sup>lt;sup>3</sup> Иткин И. Б. Русская морфонология. – М.: Гнозис, 2007. С. 56.

<sup>&</sup>lt;sup>4</sup> Антипов А. Г. Морфонологическая категоризация словообразовательной формы : автореф. дис. . . . докт. филол. наук : 10.02.01. – Кемерово, 2002. – 38 с.

<sup>&</sup>lt;sup>5</sup> Ułaszyn H. Laut, Phonema, Morphonema. *Travaux de Cercle Linguistique de Praque*. 1931. V. 4. P. 61.

<sup>&</sup>lt;sup>6</sup> Чурганова В. Г. Очерк русской морфонологии. М.: Наука1973. С. 35–36.

 $<sup>^{7}</sup>$  Бодуэн де Куртэнэ И. А. Избранные труды по общему языкознанию. В 2 тт. М. : Изд-во АН СССР. 1963. Т. 1. С. 272.

morphological structure of the word, substitute each other within the same morpheme". This definition has been repeatedly criticized, especially for an excessive psychologism. O. Reformatskyi criticized it severely: "The searches of a linear semantics forced M. Trubetskoy to introduce an unrealistic and unnecessary unit for the structure of a language – it has no counterpart in an objective linguistic reality; there is only correspondence or alternation of a morpheme variants"<sup>9</sup>.

In his later work "Das morphonologische System der russischen Sprache", M. S. Trubetskoy, for the definition of a morphoneme, focuses on the main task of morphonology: to investigate the nature and extent of the morphonological changes, combinatorial and free: "Each alternation receives correspondence in the linguistic consciousness of the speakers in the form of a morphoneme - a morphonological unit, that can be represented as a set of phonemes, involved in a particular alternation" 10. Close to this interpretation of a morphoneme – as a set of the phonemic alternatives – is inherent in the works of N. Ye. Ilyina, Z. F. Oliverius, M. V. Panova and the others. The supporters of the generative method (T. V. Bulyhina, D. Wort. R. Laskowski, M. Halle) morphoneme as an element of the deep (abstract, vocabulary) form of a morpheme, from which all the surface forms can be deduced by means of the corresponding rules. According to R. Laskowski, a morphoneme is an elementary unit of a morphonological form of a morpheme – abstracted from the morphological contexts of an ideal form of a morpheme, which can be represented by one or more distinct phonological forms. The inventory of morphonemes should be established on the basis of the analysis of all the alternative series inherent in a particular language. It is essential that a morphoneme, as an abstract unit, may not coincide with any of its representatives, such as, for example, the morphoneme of the Polish language  $\{\dot{r}\}\$ , represented on the surface (phonetic) level by  $/\ \check{z}$  /: piekarze and /r/: piekarnia<sup>11</sup>. Each morphoneme is created by the distinctive features. For vowels, it is forcefulness, a high elevation, a front row, longitude; for consonants – sonority, voiceless, voiced characteristics, a back row, labiality, an anterior row, alveolarity, continuity, explosiveness. The primary purpose of these characteristics is to distinguish the morphonological representations of the morphemes<sup>12</sup>.

<sup>&</sup>lt;sup>8</sup> Trubetzkoy N. S. Sur la "morphonologie". *Travaux de Cercle Linguistique de Praque*. 1929. V. 1. P. 85.

 $<sup>^9</sup>$  Реформатский А. А. О соотношении фонетики и грамматики. *Вопросы грамматического строя*. М. : Изд-во АН СССР. 1955. С. 99.

<sup>&</sup>lt;sup>10</sup> Трубецкой Н.С. Избранные труды по филологии. М.: Прогресс. 1987. С. 88.

<sup>&</sup>lt;sup>11</sup> Laskowski R. Budowa morfonologiczna polskich przyrostków rzeczewnikowych. *Język polski*. 58. 1973. S. 133.

<sup>&</sup>lt;sup>12</sup> Laskowski R. Studia nad morfonologia współczesnego języka polskiego. Wrocław: WPAN. 1975. S. 19–23.

The diacritical function of a morphoneme is also emphasized by S. V. Bromley: this is an abstract alternate row with a fixed distribution of its elements between the certain forms of the grammatical system, for example: the 1-person singular form of the present tense – all other forms that represent the allomorphs, the number of which is motivated by the list of the specific alternative rows. Each of them has its own set of differential features, such as "a dental sound – a palatal sound" – in allomorphs with c'//u, with  $3'//\pi c$  of the same Russian verbal forms nocumb - nouy, nosumb - now or "a dental sound – a palatal, explosive sound – an affricate sound" of the allomorphone n'//u in the opposition of nememb - neuy.

A peculiar, different from the analyzed one, approach to the interpretation of morphoneme was proposed by J. Kurylowicz. According to the scientist's opinion, a morphoneme is an excessive morph, which can be considered only in the case of a double phonological characterization of a grammatical category, cf., das Kind (in German) "Oumuha (a baby)" – die Kinder (in German) "Oimu (kids)", but Band (in German) "cmpiuka (a ribbon)" – die Bänder "cmpiuku (ribbons)" <sup>14</sup>. The scientist refers to this notion any variable part of the morpheme – and the phoneme-alternative, and each of the extensors of the morpheme, and the accent curve. The same broad understanding of a morphoneme is characteristic of the works of V. V. Lopatin of a morphoneme: it is a row of the morphonological phenomena, caused by accommodation in morphs of the motivational words and derivatives, formed in a certain word-formation position" <sup>16</sup>.

All the analyzed views on a morphoneme are combined in the two mutually opposite ones. The representatives of the first view define a morphoneme as an element of the contextual representative of a morpheme, that is, as an element of a morph (H. Ulaszyn, V. H. Churhanova), and the representatives of the second view – as an element of a morpheme, regardless of how they define the morphoneme – or as a set of phonemes, located in the relations of alternation (M. S. Trubetskoy, A. A. Zemskaya, M. V. Panov, N. Ye. Ilvina, V. V. Lopatin, Z. Oliverius), or as a certain abstraction, invariant (D. Wort, P. Laskowski, K. Kovalik, T. V. Bulyhina, S. V. Bromley).

<sup>&</sup>lt;sup>13</sup> Бромлей С.В. Морфонология и грамматика. *Общеславянский лингвистический атлас.* 1974. С. 33.

<sup>&</sup>lt;sup>14</sup> Kurylowicz J. The notion of morpho(pho)neme. *Directions for historical linguistics: A symposium* / Ed. by W. P. Lehman and Y. Malkiel. Austin: London. 1968. P. 70.

<sup>15</sup> Лопатин В. В. Русская словообразовательная морфемика. 1977. С. 291.

<sup>&</sup>lt;sup>16</sup> Горпинич В. О. Сучасна українська літературна мова : Морфеміка. Словотвір. Морфонологія. К. : Вища школа, 1999. С. 17.

The differences in approaches to the interpretation of morphonomy have the consequence of differences in the design of their inventory. For linguists focused on the phonological level of language, and therefore on the phonological nature of morphonema, it matches (or almost coincides) with the phonological inventory. In those who uphold the functional essence of morphonomy, the number of them is determined by the alternate series available in the language and significantly exceeds the number of phonemes.

We share the opinion of those linguists, who support the level status of morphonology: it has two levels (lower and higher; a lower level is adjacent with a phonological one, a higher level is adjacent with a morphological one); morphonology has two units - a morphoneme (morphophoneme) and a sub-morph (more precisely -a sub-morpheme). In the systematic study of morphonology, V. H. Churhanova was one of the first to use the term "sub-morph". In her opinion, it is a unit that expresses the "morphonological unity of the regularly organized elements of the sound structure of a word, not distinguished at the morphological level, with the elements distinguished"<sup>17</sup>. Another Russian researcher S. M. Tolstaya supports the author's efforts to provide a representation of the morphonological level of a language with the help of the homogeneous units peculiar toit, but she considers this definition contradictory for at least two reasons. Firstly, she it erases the contradistinction between the two-plan and one-plan units of a language. Secondly, she defines the paradigmatic unit through the units of another level of abstraction of a morphoneme, as the components of the morph<sup>18</sup>.

E. A. Zemska interprets the term "sub-morph" much more narrowly: these are the parts of the root morphemes that have no meaning in the word, but only coincide with affixal sets of phonemes and different types of alternations<sup>19</sup>.

For the Slovak researcher J. Bosak, the sub-morphs are the results of the development of relations between the form and the content and / or the products of a synchronous desemantization. They either emphasize the opposition between the stem and the word-forming affix, or express the derivative seams, or help to avoid the undesirable alternations or to combine formally incompatible word-forming morphemes. Other terms used in linguistic science – interfix, formative, asemantema, struktema – do not reflect the formal and functional essence of these linguistic phenomena. The term "sub-morph" expresses such an important attribute

<sup>17</sup> Чурганова В. Г. Очерк русской морфонологии. М.: Наука. 1973. С. 38.

<sup>&</sup>lt;sup>18</sup> Толстая С. М. Морфонология в структуре славянских языков. М.: Индрик, 1998. С. 58–59.

of them as independence, and hence the ability to relate to the content plan only through the segments with a full morpheme status and to be considered in relation to their invariants – morphemes<sup>20</sup>.

Consequently, the recognition / non-recognition of a morphoneme and a sub-morph as specific linguistic units, the choice of the method of their interpretation depends on the theoretical and methodological guidelines of the author, from his advocated approach to the interpretation of morphonology, its subject and tasks. Considering morphonology to be a special sphere of the language system, we admit its right to have its own units – a morphoneme as a result of generalization of phonemes and a sub-morph as a result of generalization of sub-morphs.

## Morphonemes of the word-formation from the Noun

Recognizing morphoneme as a morphological unit requires fulfilling the following tasks: 1) to outline the criteria for their selection; 2) to determine an inventory of morphonemes; 3) to detect the system connections between them. In our study, we follow a functional approach delineating the essence of a morphoneme, and S. M. Tolstaya's point of view, we recognize it as an abstract, generalized unit, a component of a morpheme<sup>21</sup> (see) in J. Baudouin de Courtenay's work: "In alternatives, the correspondence, coincidence, and difference of morphemes is reduced to the correspondence, coincidence, and distinction of the phonemes from which they consist, say  $[mog-mo\check{z}]$  splits into m/m, o//o,  $g//z^{2}$ . We consider the phonemes to represent the morphonemes, since "the units of any intermediate levels can be defined as the specific integrants of the units of the nearest of the higher ones, implemented in the units of the nearest lower level"23.

In order to establish the inventory of Ukrainian morphonemes, the following criteria are relevant primarily: 1) vocal / consonant; 2) constancy / variability; 3) velar / palatal.

<sup>&</sup>lt;sup>20</sup> Bosák J., Byzássvová K. Východiska morfémovej analýzy. Morfematika-slovotvorba. Bratislava: Veda. 1985, S. 80.

<sup>&</sup>lt;sup>21</sup> Толстая С. М. Морфонология в структуре славянских языков. М.: Индрик. 1998. С. 57.

 $<sup>^{22}</sup>$  Бодуэн де Куртэнэ И. А. Избранные труды по общему языкознанию. В 2 тт. М. : Изд-во АН СССР. 1963. Т. 1. С. 276.

<sup>&</sup>lt;sup>23</sup> Маслов Ю. С. Об основных и промежуточных ярусах в структуре языка. *Вопросы языкознания*. 1968. С. 79.

(н**о**г á/ніг - н**і** $жка), {o<sub>2</sub>} кр$ **о**в - кр**і**в-ц'-а, кр**и**в-а́в-ий, (по)кр**и́**-ти - покр**о**в - покр**і** $вля; {e<sub>1</sub>} (с$ **е**ло́/с**і**л - с**і** $л'-це); {e<sub>2</sub>} (вести́ - вод-и́-ти - приво́д-и-ти - при́від); {a<sub>1</sub>}: хапа́ти - с-хоп-и́-ти, etc.$ 

Non-constant vocal morphonemes are also possible in affixes. These are:

- 1) the morphoneme  $\{o_I\}$  (with the alternatives /o/ in an open syllable and /i/ in a closed syllable) of the suffix  $-icm_b$ :  $мелодiйн-icm_b/$  мелодiйн- $ocm_i$ ;
- 2) the morphoneme  $\{o_3\}$  of the suffix  $-o_6$ -/- $e_6$ -; the alternative /o/ functions after the stems which end in: a) a hard morphoneme, except  $\{\mathcal{K}\}$ ,  $\{u\}$ ,  $\{u\}$ ,  $\{\partial\mathcal{K}\}$  ( $\pi ic \pi ic$ - $\sigma_6$ - $\pi iu$ ,  $\sigma_6$ - $\pi iu$ ,  $\sigma_6$ - $\pi iu$ ); b) a soft morphoneme, but combined with a stressed inflexion ( $2p_{336} 2p_{33}$ '- $\sigma_6$ - $\pi iu$ ,  $\sigma_6$ - $\pi iu$ ); the alternative /e/ is possible to be used after the stems, which end in: a) a soft morphoneme, realized by a hard alternative (the exception the stems, which end in  $-n_{12}$ ,  $-n_{12$
- 3) the morphoneme  $\{i_1\}$  in the suffixes -icm / -ucm, -iчн- / -uчн-, -iзм / -uзм, -iк- / -uк-, -iнг / -uнг, -im/-um, -iн/-uн: журна́л журнал-icm / xop xop-ucm, ггієна гігієн-iчн-ий / клімат клімат-uчн-ий, хімія хім-iк / сатира сатир-uк, Ку́чма кучм-iзм / патріот патріот-uзм:
- 4) the morphoneme  $\{y_l\}$  as a component of the veral suffix -yea-:  $u\dot{a}pu uap-ye\dot{a}-mu uapie-u\ddot{u}$ ,  $(3a)uap\dot{o}ea-uu\ddot{u}$ .

The palatability characteristics / the velar characteristics is the very characteristics on which the varieties of the consonant alternative types, typical of a modern language, are based; the palatal alternative types:  $80\partial - \dot{a} - 80\partial ' - \dot{a} \dot{b} - u\ddot{u}$  ( $\partial //\partial '$ ),  $cen-\dot{o} - cen'-\dot{a} \dot{h} - u$  (n //n'),  $\partial ip-\dot{a} - \partial ip'-\dot{a} \dot{b} - u\ddot{u}$  (p //p') and the depalatization alternative types:  $u\dot{e}n\beta\partial b - u\dot{e}n\beta\partial - u\dot{u}$  ( $\partial '/\partial \dot{b}$ ),  $mon\dot{o}n'-a - mon\dot{o}n-ehb\kappa-a$  (n'//n),  $cmepmb - cm\acute{e}pm-h-u\ddot{u}$  (m'//m). The palatization / depalatization is intransitive:  $mono\kappa h-\dot{o} - mono\kappa h'-\dot{a}h/\kappa-a$ 

(H/H'), pocá - póc'-аний <math>(c//c'), npáu'a - npau-e-лю'б <math>(u'//u) і перехідною: вовк - во́вч-ий (к//ч), Conóx-a - Conóu-uh (x//u).

Under the same conditions (for example, in the positions of palatalization), different consonantal phonemes illustrate different behaviours:

- 1) are not palstalized (/ж/, /ч/, /ш/, /ðж/, /н'/, /л'/, /р'/, /j/): ми́ш-a ми́ш- $\kappa$ -a (cf,  $py\kappa$ -a pýч- $\kappa$ -a), noже́**ж**-a noже́**ж**- $\mu$ - $\mu$ ий (cf, cніz cні $\mu$ - $\mu$ - $\mu$ й), 3o**р'**-a 3ó**р'**-aн- $\mu$ ий;
- 2) they undergo only an itransitive palatalization (/л/, /н/, /p/, / $\mu$ /): cи́л-a cи́л'- $\mu$ - $\mu$  ( $\mu$ // $\mu$ ),  $\mu$ 0  $\mu$ 1.  $\mu$ 3  $\mu$ 4  $\mu$ 6  $\mu$ 7  $\mu$ 6  $\mu$ 7  $\mu$ 6  $\mu$ 7  $\mu$ 8  $\mu$ 9  $\mu$
- 3) only a transitive palatalization (/г/, /к/, /х/, /t /, /ų'/, /ð'/, /m'/, /з'/, /c'/, /ð3'/, /б/, /n/, /в/, /м/, /ф/): сніг сніж-ок (г//ж), ног-а́ но́3'-а (г//з'), рук-а́ ру́ц'-а (к//ц'), ву́х-о ву́с'-о (х//с'), мі́сяц' місяч-е́ньк-о, ведмід'— ведме́ж-ий (д'//ж), соло́м-а соло́мј-ан-ий (м//мј);
- 4) an itransitive and transitive palatalization (/д/, /m/, /з/, /с/, /д͡з/): верблюд верблю'д'-ячий (д//д'), верблю'ж-ий (д//ж).

The above-mentioned and the phonemes behavior in positions of depalatization give grounds to single out the morphonemes classes:

- $-\{H\}, \{\Lambda\}, \{p\}, \{u\}$  as a result of generalizing of the alternatives  $\{H-H'\}, \{\Lambda-\Lambda'\}, \{p-p'\}, \{u-u'\}$  in the palatalization positions;
- $-\{\mu'\}$ ,  $\{\pi'\}$ ,  $\{p'\}$ ,  $\{u'\}$  as a result of generalizing of the alternatives  $\{\mu'-\mu\}$ ,  $\{\pi'-\pi\}$ ,  $\{p'-p\}$ ,  $\{u'-u\}$  in the depalatalization positions;
- $-\{\kappa\}, \{z\}, \{x\}, \{t\}$  as a result of generalizing of the alternatives  $\{\kappa-\mu'-\mu\}, \{z-3'-3\kappa\}, \{x-c'-\mu\}, \{t-\delta 3'-\delta 3\kappa\}$  in the palatalization positions;
- $-\{ \delta \}$ ,  $\{ M \}$ ,  $\{ \phi \}$ ,  $\{ \epsilon \}$  as a result of generalizing of the alternatives  $\{ \delta \delta j \delta \pi ' \delta \pi \}$ ,  $\{ n n j n \pi ' n \pi \}$ ,  $\{ M M j M \pi ' M \pi \}$ ,  $\{ \phi \phi j \phi \pi ' \phi \pi \}$ ,  $\{ \epsilon \epsilon j \epsilon \pi ' \epsilon \pi \}$  in the palatalization positions;
- $-\{\partial'\}, \{m'\}, \{3'\}, \{c'\}, \{\partial 3'\}, \{u'\}$  as a result of generalizing of the alternatives  $\{\partial' \mathcal{H}\}, \{m' u\}, \{3' \mathcal{H}\}, \{c' u\}, \{\overline{\partial 3'} \overline{\partial \mathcal{H}}\}, \{u' u\}$  in the palatalization positions and  $\{\partial' \partial\}, \{m' m\}, \{3' 3\}, \{c' c\}, \{\overline{\partial 3'} \partial 3\}, \{u' u\} \text{in the depalatalization positions;}$
- $-\{\partial\}, \{m\}, \{3\}, \{c\}, \{\overline{\partial}3\}$  as a result of generalizing of the alternatives  $\{\partial-\partial'-\varkappa/\partial\varkappa\}, \{m-m'-4\}, \{3-3'-\varkappa\}, \{c-c'-u\}; \{\partial 3-\overline{\partial}3'-\overline{\partial\varkappa}\};$
- $-\{\mathcal{H}\}, \{u\}, \{\mathcal{DH}\}, \{\mathcal{DH}\}, \{j\}$  the consonant morphonemes, which are realized in different positions by the same phoneme;
- $-\{\varkappa_l\}, \{u_l\}, \{u_l\}$  as a result of generalizing of the alternatives  $\{\varkappa_l\}, \{u_l\}, \{u_l\},$

- $-\{u_2\}$ ,  $\{uu_2\}$  as a result of generalizing of the alternatives  $\{u-u'\}$ ,  $\{uu-c'\}$  of the word-formation pairs:  $\partial o u \kappa a \partial o u \kappa$ ,  $copou \kappa a copou \kappa$ ,  $no \partial v u \kappa a no \partial v c \kappa$ ;
- $-\{u_I\}, \{c_I\}, \{3_I\}$  as a result of generalizing of the alternatives of the loan roots (stems)  $\{u-m\}$  (перцепція перцептивний),  $\{c-m\}$  (емісія емітент),  $\{3-m\}$  (синтез синтетичний); the word-formation pairs on the analogy with cna3M cnacmuчний demonstrate the alternation 3M//cm the morphoneme  $\{3M\}$ .

### **Sub-morphemes of the word-formation from the Noun**

Since morphonology also distinguishes the morpheme sublevel, it is necessary to distinguish and to characterize its unit representatives in the morphonological description. They must illustrate the signs that are common with morphemes in the language, but not equal to them, do not reach their status. The most important ones in their list are: having a morphonemic structure peculiar to the morphemes of a particular language and occupying the same position in the word stem; outwardly coincide with language morphemes and be modified according to the same rules; to influence the way of a word-formation and morphonemic structure of words. The term "sub-morpheme" expresses: a) the dependent nature of these units, their subordination to the morphemes in which they act and only through which they participate in the expression of a particular (class or categorical) value; b) their potential to exist in several positionally predetermined formal manifestations – the sub-morphs, regulated by the morphological norms of a language. The sub-morphs, therefore, are indented on the plane of real words (non-derivatives and derivatives) as special components of their minimal significant parts – the root and affix morphs. On condition of the form coincidence of these two entities morphemes and sub-morphemes, we consider them homonymous units. This is how the meaningful relations between different implementers – suffixal relations – one suffixeme are considered E. A. Karpilovska: "We see the manifestation of the content dimension in those suffix relations that can be homonymous with suffixes. Within the homonymity spectrum, we identify the links that are similar to both these functional types of suffixes or one of them"<sup>24</sup>.

<sup>&</sup>lt;sup>24</sup> Карпіловська Є. А. Суфіксальна підсистема сучасної української літературної мви : будова і реалізація. К. : Ін-т мовознавства ім. О. О. Потебні НАН України. 1999. С. 249.

By the term "suffixal relations" the researcher covers only submorphs, such as -anb in micmépis - micmepi-ánb/н-ий, -eй in <math>Cepóna - eepon-éй/cbkuй, -m — in apzo — apzo/m-ú3m, considering it to be the most explicit among all suggested in the linguistic literature "the position of these elements in the stem of a word and their purpose in it". K. Kovalik offers a close meaning of the term "intermorph" for the characteristics of the same segments<sup>25</sup>.

Both researchers do not agree to recognize these elements as purely structural: according to the degree of involvement in the construction of the semantic structure of the derivative word, they distinguish the semantically empty components and the components that express a certain additional meaning. N. F. Klymenko attributes to these segments (asemantems) a purely constructive function. This is the construction material that helps to "eliminate the difficulty of combining morphemes at their seams and to express the motivational relationships between words more clearly..."<sup>26</sup>.

As the factual material attests, the sub-morph class is not homogeneous. The scientists classify them on the basis of different criteria. V. V. Lopatin's classification is based on 3 criteria: functional, formal and regular<sup>27</sup>.

On the basis of the former, they are divided into 3 groups of submorphs: a) the sub-morphs, relevant for the presence / absence in all morphs of some morpheme – root or suffix; b) the sub-morphs, relevant for the compatibility of morphemes with certain morphs; c) the sub-morphs, relevant to certain morphonological transformations of the stem. According to the second criterion, the sub-morphs are divided by the researcher into those, which coincide in a form aspect with the affixal morphs in the language. The criterion of regularity allows us to distinguish frequent the sub-morphs that are regularly allocated under certain conditions and the single sub-morphs (combined with one or more stems, as -um in негримянський).

I. I. Kovalyk accepts the division of the sub-morphs into "functionally equivalent to the root morphs", for example,  $3-Bu\kappa-a-mu$ , and the sub-morphs "parallel to the form morph", as in the word-form  $n\omega \delta - o\varepsilon - i^{28}$ . He permits the possibility of functioning in the word two sub-morphs – root and affixal or two affixal.

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<sup>&</sup>lt;sup>25</sup> Kowalik K. Budowa morfologiczna przymiotników polskich. Wrocław: Ossolineum. 1977. S. 99.

 $<sup>^{26}</sup>$  Клименко Н. Ф. Основи морфеміки сучасної української мови. К. ІЗМН. 1998. С. 7.

 $<sup>^{27}</sup>$  Лопатин В. В. Русская словообразовательная морфемика. 1977. С. 58–60.

<sup>&</sup>lt;sup>28</sup> Ковалик І. І. Вступ. Дериватологія (словотвір) як самостійна лінгвістична дисципліна та її місце у системі науки про мову. *Словотвір сучасної української літературної мови : монографія*. – К. : Наукова думка. 1979. С. 23.

Jan Bosak insists that there are 4 varieties of the sub-morphs in the language: a) residual sub-morphs in words with a defective division; b) thematic (formers of verbal stems); c) connective (in compound or derivatives, suffixes); d) asemantic segments of an actual synchronous derivation, that is, through a stepwise word-formation<sup>29</sup>.

In our study, we distinguish between the root and affixal submorphemes. The root class is formed by 4 subclasses:

- 1) the sub-morphemes of specific, but secondary noun roots, in particular:  $\{/\#_4m'-\}$ ,  $\{/e_1\mu'-\}$ ,  $\{/\#_3\mu'-\}$ ,  $\{/\#_1\kappa-\}$ ,  $\{/\#_4\kappa-\}$ ,  $\{/\#_1\mu'\}$ ,  $\{/\#_3\mu'\}$ ,  ${/u\kappa}, {/u\mu'-}, {/ap'-}, {/c'\kappa-}, {/uн-}, {/y\kappa-}: ніг/оть, рем/інь, дят/ел,$ телеп/ень, боч/к-а, паруб/ок, сон/ц-е, пал/ець, яз/ик, капл/иц'-а, палам/ар, Мін/ськ, мал/ин-а, полон/ин-а, байстр'/ук.
- 2) the reflexes of the constituents of ancient roots, as {/ep-} in брат брат/ер-ський, or ancient suffixes, as {ec-} in небо / небеса — неб/ес-H-ий,  $\{eH$ - $\}$  in iMg' / iMeHi — iM/eH-Hий, iM/eH-H-g,  $\{aM$ - $\}$  in nopocg' $nopoca'mu - nopoc/a'm-\kappa-o;$
- 3) more / less regularly repeated final segments of the stems of loan substantives that in donor languages usually function as morphemes word-forming and form-building: {/ij-}, {/ij}, {/i3M}, {/icm}, {/o3}, {/ep}, {/op}, {/ум}, {/oc}, {/uc}, {/iн}, {/он}, {/iк-}, {/am}: анало́г/ij-а, алю́в/ій, фаш/изм, атеј/ізм, арт/ист, анабі/оз, гангст/ер, акт/ор, мінім/ум, косм/ос, скепс/ис, аспір/ин, анальг/ін, нейл/он, дедер/он, математ/икa. ло́г/ік-а. плаг/іа́т.
- 4) wideners  $(\frac{1}{\tilde{u}}, \frac{1}{\tilde{u}}, \frac{1}{\tilde{u}}, \frac{1}{\tilde{u}})$  of the stems of immutable borrowed substantives that prepare formally atypical roots for the interaction with word-forming suffixes: желе́ – желе́/й-ний, фула́ –  $\phi$ ула/н-і́ст, арго́ — арго/т-и́зм, кіно́ — кіно́/ш-ний, крокі́ — крокі/jveámu. Sometimes these units are found in the form of variable lexemes – usually borrowed:  $\theta \dot{\theta} \partial a - \theta \dot{\theta} \partial a \dot{\beta} \dot{\beta} \partial a$ , rarely – and specific, but only if the suffix interacts not with the stem but with the word form as a whole, for example,  $ce6\acute{e} - ce6\acute{e}/u$ -ник: Кара прийшла йому ... кара від Бога, за те, що приховав скарб від ігумена, що не віддав його Нестору на книгозбірню... Для себе приховав! Себешник окаянний (R. Ivanchenko). V. V. Lopatin<sup>30</sup>, N. O. Yanko-Trynytska<sup>31</sup> widen the effect of this regularity not only to the formations of the type алгебра алгебраический, проза – прозаический, but тема – тематический.

The affixal sub-morphemes widen the word-forming suffixes, on condition their original morphs cannot be involved into the derivative

<sup>30</sup> Лопатин В. В. Русская словообразовательная морфемика. 1977. С. 77. <sup>31</sup> Янко-Триницкая Н. А. Словообразование в современном русском языке. М.: Индрик. 2001. С. 250.

<sup>&</sup>lt;sup>29</sup> Bosák J., Byzássvová K. Východiska morfémovej analýzy. Morfematika-slovotvorba. Bratislava: Veda.

interaction with the roots (stems) of a particular morphonological class. Often, the segments are such wideners  $\{-ij/\}$  /  $\{-ej/\}$ ,  $\{-ie/\}$  /  $\{-oe/\}$ ,  $\{-a\mu/\}$ ,  $\{-u\mu/\}$ ,  $\{u\mu/\}$ ,  $\{u\mu/\}$ ,  $\{u$ 

So, the extension of the suffix morphs -eub, -cbκ- by the sub-morph  $\{-aH/\}\$  occurs when the word is: a) the name of the state on condition when a generative word – is: a) the name of the state in  $-u\kappa a$ :  $A M \acute{e} p u \kappa a$  – америк-а́н/ець, америк-а́н/ськ-ий;  $\acute{A}$ фрика — африк-а́н/ець,  $\acute{a}$ фрикан/ськ-ий; Коста-Рика – костарик-ан/ець, коста-рик-ан/ськ-ий; 6) a proper name with the morphoneme  $\{\kappa\}$  in the final position of a generative stem: Маро́кко марокк-а́н/ець, \_ марокк-ан/ськ-ий, Франциск – франциск-а́н/ець; в) а proper name in -i $\mathfrak{I}$  on condition of its partial clipping: Вікторія — вікторі-ан/ець, Преторія — преторі-ан/ець;  $\Gamma$ ) the name of a state or the surname in -a (- $\pi$ ) with a final sonorant in a stem: Бірма - бірм-а́н/ець, бірм-а́н/ськ-ий; Потебна́ - потебн '-а́н/ський. Supporting the idea of the root (кіно/ш-н-ий, кофе/й-н-ий) and affixal (кант-і/ан-ськ-ий) extensions and explaining their appearance in a derivative for a purely pragmatic purpose, I. H. Myloslavskyi considers the segments of  $\{-uh/\}$ ,  $\{-ah/\}$  (ялm-uh/ський, канm-i/ah/ський) to be the suffixes that express, though with excess, the adjectival meaning: -uh-,  $-aH = -cb\kappa - {}^{33}$ .

Family names of males, rarely general names, can form names of persons according to their social, political, religious, etc. group or view. In this case, the sub-morph {-aH/} needs the sub-morph {-i/}: Φεŭερδάx – φεŭερδαx-i/άH/εμь, ΚαΗΜ – καΗΜ-i/άΗ-εμь; Γέσεπь – σεσεπь-j/άΗ/εμь; *περμιδόρ – μερμιδορ-i/άΗ/εμ*ь. The same morphonological structure – with the sub-morphs -i/αH/} (-im/αH/}) – have some derivatives from the borrowed names of planets and cities: *Mapc – μαρc-i/άΗ/cьκ-μŭ*,

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<sup>32</sup> Булыгина Т. В. Проблемы теории морфологических моделей. М.: Наука. 1977. С. 47.

<sup>&</sup>lt;sup>33</sup> Милославский И. Г. Вопросы словообразовательного синтеза. М.: Изд-во Московского университета. 1980. С. 29–30.

None of the above-mentioned sub-morphs can extend the adjective suffix -H-, it has its "own" modifiers: {-uu/} ({-iu/}), {-ap/}, {-o3/}, {-aль/}, {-uв/}: геоме́трія — геометр-и́ч/н-ий, калейдоско́п — калейдоско́п— калейдоско́п-і́ч/н-ий, моле́кула — молекул'-а́р/н-ий, гангре́на — гангрен-о́з/н-ий, ка́федра — кафедр-а́ль/н-ий, рефера́т — реферат-и́в/н-ий. Some of them allow (or even require) their extenders to formthe sub-morphic complexes {-i/an'/}, {-am/o3/}, {-am/u4/}, {icm/u4/} ({-ucm/u4/}): бро́нхи — бронх-і/а́ль/н-ий, ідеалі́зм — ідеал-іст/и́ч/н-ий, плюралі́зм — плюрал-іст/и́ч/н-ий, пробле́ма — проблем-ат/и́ч/н-ий. All of them are quite clearly differentiated by the positions.

The factual material confirms the topicality for the morphonology of the Noun word-formation of the opposition of sub-morphs on the basis of their preservation / non-preservation in the structures of the derived words. The attention should be paid first to the root sub-morphemes of the 1st and 3rd subclasses, as well as the suffixal sub-morphemes. The suffix extenders, on condition of clipping of the suffix, are mainly preserved in the structure of the generative stems:  $Mapc - mapc - i/\acute{a}H/eyb - mapci\acute{a}H - \kappa - a$ , Аме́рика - америк-а́н/ськ-ий - американ-і́зм. The root sub-morphemes of the subclasses mentioned are subdivided into those that are preserved in all positions without exception, and those, that are preserved only in the part of the positions. The preserved sub-morphemes are primarily the following ones:  $\{/ap'-\}, \{/u\mu_{l}-\}, \{/u\mu'-\}, \{/om'-\}, \{/\#_{l}\pi-\}, \{/ep-\}, \{/up-\}, \text{ to}$ elicited  $-\{\#_1 \mu'_2-\}, \{c_b\kappa-\}, \{\#_2\kappa_1-\}, \{\#_3\kappa_2-\}, \{i_3M-/u_3M-\}, \{u\kappa-\}, \{ij-\}, \{ij\}, \{ij\},$  $\{uc-\}, \{oc-\}, \{am-\}, \{ym-\}, \{am-\}, cf.: бо́нд/ар - бо́нд/ар-ськ-ий, бонд/ар$ е́нк-о, бонд/ар-і́вн-а, бонд/ар-и́х-а, бонд/ар-н'-а, бонд/ар-к-а, бонд/арств-о, бонд/ар'-ува-ти and фаш/изм — фаш-ист, алюмін/ій — алюмінám, жр/ець — жр-и́и'-а.

Consequently, sub-morphemes, like morphonemes, play a significant role in shaping the expression plan for the derivative words of a language. In the vast majority of cases, the knowledge of the conditions of their functioning (and to this knowledge, every speaker, according to J. Boduen de Courtenay, "comes due to the degree of the accumulation and consolidation of the psycho-phonetic associations in a speaker's soul" 34)

 $<sup>^{34}</sup>$  Бодуэн де Куртэнэ И. А. Избранные труды по общему языкознанию. В 2 тт. М. : Изд-во АН СССР. 1963. Т. 1.

allows one to predict or their appearance in the derivatives that spread one of the components of the word-formation structure, or, on the contrary, their clipping.

#### CONCLUSIONS

The analysis of the morphonological structure of derivatives of the Noun word-formation nests of different morphonological types gives grounds for the recognition of morphonology as a special level of the language sub-system. Its special status is determined by its two, we can assume, mutually opposing characteristics: intermediate characteristics and independence. The first of these characteristics is related to the semiotic independence of the morphonological phenomena and the means: the morphonological rules and patterns merely ensure the transition from the minor linguistic entities to signic. The second characteristics — with the functional load of the morphonological transformations, the creation of a system of new relations on this basis. This gives grounds for the separation within the morphonological level, on the one hand, two sublevels, and on the other hand, — specific for each of them units.

The morphoneme is a lower-level unit, which is directly in contact with the phonological language level. A higher-level unit that interacts with morphology is a sub-morpheme. It is defined as a generalized, abstracted from the morphological contexts, minimal component of a morpheme. The phonemes appear on the plane of real words (word forms). The most important consider the opposition of morphonemes on the basis of vocal – consonant, constant – variable, velar – palatal.

The sub-morpheme is a component of the morphonological structure of the morpheme, which in its form coincides with one of the specific or borrowed affixal morphemes that function in the system, but does not reach their level in terms of meaning. The sub-morpheme, as an abstract unit, is represented by sub-morphs, which may differ in their phonemic composition in accordance with the current morphonological patterns. In the study, we classify the sub-morphemes into the root and affixal. In the root class we distinguish 4 sub-classes on the basis of the corresponding features. Also important for the characterization of the sub-morphs is their juxtaposition with respect to the sign of preservation / non-preservation in the composition of the derivative word. The emphasis is also placed on the semiotic functions of the sub-morphs.

#### **SUMMARY**

The article deals with the expediency of distinguishing specific units of the language system – morphonological ones. On the basis of the analysis of the opinions of scientists, representatives of different linguistic schools and directions, the conclusion is made about the specificity of the morphonological level in the systematic organization of language. It is determined, on the one hand, by its intermediate (between phonetics and morphology) character and, on the other, by the fact of using asemantic elements (phonemes) to identify and distinguish significant units (morphemes and words). This is in favor of the complexity of the morphonological level, the allocation within it of two sublevels (lower and higher) and two units (morphoneme and sub-morpheme). A sub-morpheme is a unit of its higher sublevel, one that directly interacts with the morphological one. The most relevant features of each unit are identified and characterized. In morphoneme, it is vocal / consonance, constancy / variability, velarity / palatability. In submorphs, it is a coincidence in terms of expression with affixed elements, asemanticity, attachment to root or suffix morphemes, preservation / non-preservation during derivative procedures.

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