

Derivative Words of The Modern Ukrainian Lexicon in The Context of Morphonology

Mariia Fedurko ^{1 *}, Iryna Babii ², Vira Kotovych ¹, Anzhela Kuza ³,
Liliia Lushpynska ², Petro Matskiv ¹

¹ Drohobych Ivan Franko State Pedagogical University, Drohobych, Ukraine

² Ternopil Volodymyr Hnatiuk National Pedagogical University, Ternopil

³ Lviv National Environmental University, Lviv region, Ukraine

*Corresponding author E-mail: mfedurko@ukr.net

Received: June 9, 2025, Accepted: July 4, 2025, Published: July 14, 2025

Abstract

The article presents the views of various linguists on approaches to modifying the phonemic structure of morphemes, identifies patterns of morphophonemic alternations of modern words of the Ukrainian language, analyzes morphophonemic positions in modern words, reveals regular and irregular morphophonemic positions in modern words by the norms of the modern Ukrainian language, identifies features of word formation of commonly used modern words (occasionalisms), and establishes features of their functioning in the modern Ukrainian language. A theoretical generalization is made regarding the most important issues of morphophonemic science its subject and tasks, concepts, paradigms, approaches to the study of morphophonemic facts, units, and their relationship to the semantic plan of the language; the focus of attention is also directed to the relevance of considering morphophonemic phenomena as a whole.

Keywords: Language; Morphophonology; Morphophonemic Changes; Morphophonemic Science.

1. Introduction

Derivation has always been the main source of language vocabulary enrichment, and, therefore, the issue of formal interaction of word-forming morphemes has invariably attracted and continues to attract the attention of researchers. It should be noted that the vast majority of the minimum meaningful units of language - morphemes, interacting in the composition of inflectional and word-forming forms, usually partially modify their plan of expression. These modifications are not sporadic and chaotic, but regular. All this resulted in the distinguishing of a separate field in the science of language morphophonology, with its two departments, namely inflectional morphophonology and word-forming one.

Morphophonology investigates how word construction interacts with phonology. The phonologies of the world's languages differ not just in static qualities such as segment inventories and phonotactics, but also in dynamic, morphophonological variations.

In morphology, variety occurs when speakers can choose between distinct forms while creating new forms [9]; [12]; [31]; [32]. Type frequencies of distinct patterns in existing forms have a significant impact on the novel forms developed by speakers [1]; [5]; [27]; [28]. Morphophonemic refers to the relationship between morphology and phonology. This means that morphophonemics is concerned with the study and categorization of phonological variables that impact morphemes, or, more specifically, grammatical elements influencing phonemes [2]. Similarly, Jensen [13] defines morphophonemic as the process of influencing phonological circumstances through morphemes and sequences of morphemes.

Morphophonology is commonly referred to as 'morphophonemics'. In turn, morphophonemic processes are closely related to affixation processes. The phrase 'morphophonemic processes' is formed from the terms "morpheme" and "phoneme". The term "morphophonemic" refers to variations in the form of morphemes caused by phonetic influences, or the study of such variations. Parera [25] believes that the form change of a morpheme is determined by the sounds around it, which pertains to the relationship between morphemes and phonemes. It is also known as morphophonemic alterations. Figure 1 shows an example of a morphophonemic technique.

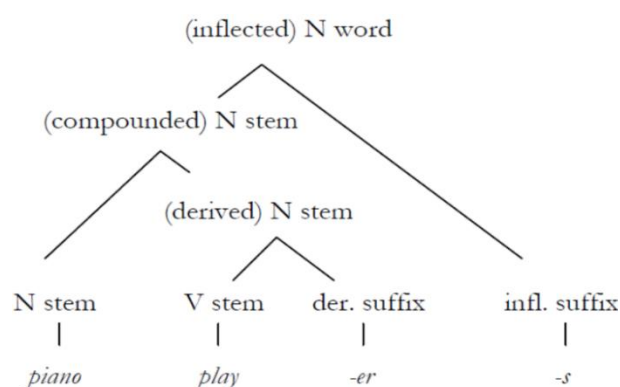


Fig. 1: Example of Morphophonemic Approach [21].

One major problem for morphological inflection systems is recording language-specific morphophonological changes. This is especially true for Slavic languages, such as Ukrainian, which have complicated morphology.

Word-formation morphonology of new words is a promising area of scientific investigations. As Ukrainian researcher E. Volyanska [33] rightly notes, recently in Ukrainian studies, the attention of linguists has been drawn to the study of word-formation and inflectional morphonology based on noun, verb, and adjective derived units. At the same time, it should be noted that there is no systematic study of the descriptive morphonology of new words in the Ukrainian language, which determines the relevance of such studies.

Depending on the surroundings, a morpheme may take on several shapes. The form of a morpheme can be influenced by neighboring sounds, the type of stem it is linked to, and other conditioning variables. Allomorphs are morphemes of systematically different forms. When a morpheme changes shape in response to the sounds around it in each context, linguists commonly refer to this variation as morphophonemics (or morphophonology), and the patterns that describe the appearance of the allomorphs are defined as morphophonemic rules (or morphophonological rules) [21].

Morphophonemics can also be viewed as the link between phonology and morphology. Phonological patterns (or "rules") govern how sounds are pronounced in specific situations. They simply pertain to sound sequences and do not depend on whether they contain specific morphemes. Most morphophonemic patterns are simply phonological patterns that emerge when morphemes combine to form words. However, some morphophonemic patterns are only applicable when morphemes are combined. These are morphophonemic patterns, not phonological patterns.

According to Ramlan [29], morphophonemic shifts occur when one morpheme merges with another. He also defines the morphophonemic process as a form shift that involves both phoneme and morpheme. Morphophonemics is a field of structural linguistics that investigates variations or changes in the phonemic structure of allomorphs of two or more morphemes that combine to produce new derivational and inflectional word forms.

Morphophonemics is also the study of how morphemes are represented phonetically in various environments. It should be observed that the description of changes in phonemic structure is evaluated from a synchronic, rather than a diachronic, perspective. Synchronic linguistics is focused on developing the simplest feasible account of a language's present structure, whereas diachronic or historical linguistics is concerned with providing the most accurate description of the changes that have happened throughout a language's history. When observing the phonemic change in the structure of allomorphs of morphemes that combine to produce a new word, one allomorph is regarded as the normal form, while the other (s) is the variation or changes from the normal [24].

The term "morphophonemic" refers to variations in the form of morphemes caused by phonetic influences, or the study of such variations. According to Parera [25], the change of form in a morpheme is determined by the sounds that surround it, which pertains to the relationship between morphemes and phonemes. This is also known as a morphophonemic shift.

According to O'Grady et al. (1993), morphology in linguistics is the study of word structure. It aims to define the system of categories and rules that govern word creation and interpretation. The psycholinguistic study of morphological processing tries to understand how word structure influences language processing. Furthermore, the researchers say that rules that account for alternations between allomorphs (morphophonemic alternations) are called the morphophonemic rules.

Recent years have seen significant advances in morphological (re-)inflection and morphological analysis (e.g., 23; 16; 4). However, language-specific research (other than that based on the English language) in this topic remains few. Some scholars studied morphological processes in Arabic and Indonesian languages [22]; [2]. But Slavic languages and Ukrainian have not become a subject of thorough investigation.

2. Method

The study of morphophonological alternations in the light of semiotic problems of systemic categorization reveals the least developed issues of the formative capacity of sound form, related to the discussion of (1) the motivational significance of changes in the structure of the signifier; (2) system-centric rules for the functioning of sound differences in the constituents of level structures; (3) dynamic tendencies of inter-level attraction of indicators of asymmetry/symmetry of sound form; (4) typological distribution of motivational content in models of "structuring of external form."

The methodological basis of the semiotic coverage of word-formation morphology is determined by the nature of the problematic issues and the stated goal and objectives. Following the principles of anthropocentrism and functionalism determines the synthesis of procedures of system-structural and dynamic linguistics, taxonomic and explanatory approaches to linguistic phenomena.

Understanding the content of a morphophonological rule undoubtedly depends on the concept of morphophonology shared by the researcher. During our research, we proceeded from the fact that morphophonological phenomena have their purpose. Thus, their goal is to implement, maintain, or strengthen the differentiation of forms at the morphological level. A comprehensive, structural-semantic, distinguishing, and characterization of morphoderivatives in the morphoderivational structure of new formations was carried out. In our opinion, those phenomena that are dictated by the rules of phonetic adjustment of morphemes and which are easily explained by phonetic reasons are not morphophonological. For example, the rules for the appearance of connecting vowels within compound words should not be attributed to morphophonology if they are caused by the outcome of the first stem [30].

Thanks to the above-described theoretical toolkit, the theoretical significance of the study lies in the further study of word formation from a cognitive point of view, in the analysis of some empirical data and the development of theoretical provisions relevant for a broad understanding of the nominative process (especially the process of formation of integrally formed lexical units), for the reconstruction of the procedural side of thinking and a better understanding of the operational part of linguistic consciousness. The place of morphonology in word formation in our suggested approach can be schematically depicted as follows (see Figure 2):

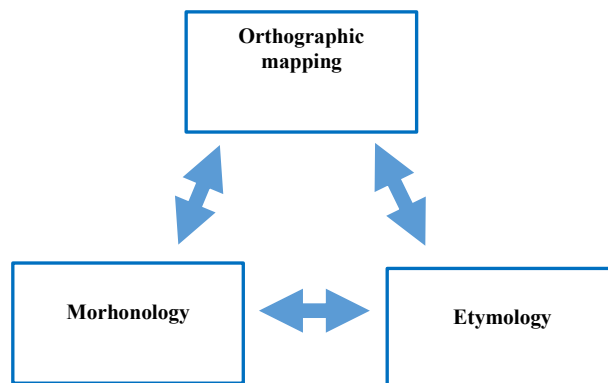


Fig. 2: The Place of Morphonology Is Word Formation (The Vision for the Current Research)2

3. Results and discussion

In the Ukrainian language, morphophonological phenomena support the existence of derivatives of a certain word-formation type. The functioning of homonymic or patronymic lexemes without morphophonological modifications enhances the role of the latter in expressing some lexical and grammatical meanings. They serve as a formal means of semantic differentiation of different derivatives. For example, adjectives and participles formed with the suffix *-н-* from verbal stems are formally distinguished only by the morphophonological phenomenon of truncation of the suffixal vowel /a/ at the end of the stem (compare *прив'язний* – *прив'язаний*, *відкидний* – *відкиданий*, etc.).

Elision of final vowel phonemes in verbal stems is a characteristic feature of the formation of verbal adjectives, cf. also the existence of patronymic lexemes with the suffix *-н-* and its extended variants *-ив-*, *-ічн-*, *-альн-*: *вегетатив* – *вегетативний* – *вегетатійний*, *декоративний* – *декораційний*, *гармонійний* – *гармонічний*, *музикальний* – *музичний*, etc. Most morphophonemic modifications participate in the formation of certain word forms or new lexemes together with affixal means. In such cases, the grammatical load of phonemic changes is less pronounced, but is characteristic of such modifications. Morphophonemic phenomena are as obligatory for the form- and word-forming process as the change of inflections or the addition of an affix, but they do not take over all the functions.

The conditions necessary for the functioning of morphophonemic phenomena are created by the interaction of the word stem and inflection (during word change) and the formative stem and derivational suffix (during word formation). To characterize these conditions, there is a concept of position, borrowed from phonology [6]. The concept of position is more meaningful than environment, since it “not only determines distribution, but also encompasses the idea of dependence on the environment, that is, the non-randomness of the connection of the unit being studied with neighboring units, the conditionality of their neighborhood or the prohibition of combination” [8]. In morphophonemic studies, the terms ‘morphological’ and ‘morphophonemic’ positions are used.

The most common among them is the concept of morphophonemic position, which is used in two meanings: it is understood as either the nature of phonemes at the intermorpheme (word-forming) seam [33], or the conditions for combining units of a certain grammatical character and phonemic composition [14]. In the second meaning, the concept of morphophonemically relevant position is also used. Since morphophonemic phenomena are associated with the transmission of certain grammatical meanings, interact with affixes, but at the same time depend on the phonemic composition of morphemes (stems) that participate in the processes of form and word formation, the concept of morphophonemic position more precisely conveys the conditions for the implementation of such modifications.

However, in some cases, especially in the case of truncation and augmentation, it is difficult to establish a relationship between the phonemic composition of morphemes and those morphophonemic phenomena that participate in the processes of form and word formation.

To describe such phenomena, the concept of grammatical position is used in compatibility with units of a certain grammatical character [14]. Generalizing the concepts of morphophonological and grammatical position, we draw attention to the conditions for the functioning of morphophonological phenomena. This term denotes the combination of the base (formative base) and affixes with a certain phonemic structure and grammatical meaning. To describe morphophonological modifications, it is important to characterize those phonemic compounds that are in the zone of combination of morphemes during form and word formation (the so-called contact zone). When studying word-formative morphonology, it is necessary to consider the morphophonological compatibility of the formative base and the word-forming affix. In this case, the final phonemic compound of the formative base (final) and the initial phoneme or combination of phonemes of the word-forming suffix (initial) are of decisive importance.

Establishing the phonemic structure of morphemes (stems) in the contact zone is the first stage of describing morphophonological phenomena that function in the system of form and word formation of modern language. Phonemic changes lead to the formation of morphs, morphophonological variants of the main morph, which appear in the original form. That is why the problem of identifying morphs in one morpheme is close to morphophonology, although it is not directly the subject of its study [3].

For morphonological research, the problem of the original form is important, to which the question of the direction of modifications of the morphemes’ phonemic composition (primarily alternation) is directly related. Morphophonological phenomena are closely related to the semantic aspect of language, but also depend on the phonemic structure of morphemes (bases). The formal substrate of morphonological modifications is phonemes; therefore, phonological theory is important for morphonology. Each morphonological theory is based on a phonological basis, since the boundary between morphonology and phonology “is drawn depending on the concept of phoneme adopted by the researcher” [7].

The difference in approaches to the interpretation of the morphophoneme in the Ukrainian language has resulted in differences in the delineation of the inventory of this class of units. For linguists who focus on the phonological level of the language during the analysis of morphophonological phenomena, and, therefore, on the phonological nature of the morphophoneme, it coincides (or almost coincides) with

the inventory of phonemes. Thus, some Ukrainian researchers distinguish 43 morphophonemes, while others - 39 [8]. In the works of researchers who focus on the functional essence of morphemes, the number of the latter shows dependence on the alternation series available in the language and, therefore, significantly exceeds the number of phonemes.

By their role and importance, morphophonological phenomena form a hierarchical system, in which alternations occupy the main place. Namely, functional analysis makes it possible to identify not only the specificity of morphophonological phenomena but also their systematicity and to trace the trends in the development of the morphophonological system of a particular language. Characteristic morphophonological phenomena for verb neologisms (deverbatives) are: 1) alternations based on the characteristic of palatality / depalatality (закалькований – закалькованість (н/н'): «Укладеному О. Авраменком збірникові текстів для диктантів ... можна закинути багато що. І закалькованість (чи не з кожного зі 100 поданих текстів...)»), збабіти – збабіння; 2) consonant alternations (знайти – роззнайти (м/мл); 3) consonant alternations + alternations based on the characteristic of palatality / depalatality (недолюблювати – недолюбець (б/бл')). The definition of the word for the last given neologism, deverbative, is a linguistic issue. The problem of motivation of new words is promising for further study and research, namely in the morphophonological aspect.

The specificity of morphonology as a pre-morphology is that a morpheme, as a minimal “two-sided unit that has meaning and material means of its expression” [17] is capable of variation in terms of form. The following characteristics define manifestations of this variation, known as allomorphs: 1) they have the same meaning; 2) they possess formal (phonemic) proximity, which refers to a partially similar phoneme composition and succession order; and 3) they only replace one another in specific positions, being in a mutually exclusive context [17]. It is important that the last condition additional distribution of morphs, is not rigid. Variant forms, in our interpretation - morphonological variants – make it such as it is: вітрець – вітерець, міст-ян-и – міщ-ан-и, венний – венозний, etc.

The examination of the actual material of the Ukrainian language confirms the relevance of the opposition of submorphemes for the morphonology of noun word formation, based on their preservation/non-preservation in the structures of derived words. Attention should be paid primarily to the root submorphemes of the I and III subclasses, as well as to suffixal ones. Suffixal expanders, provided that the suffix is truncated, are usually preserved in the structure of the derivational bases: Марс – марс-і/ан/ець – марсіан-к-а, Америка – америк-ан/ськ-ий – американ-ізм. The subclasses' root submorphemes are separated into two categories: those that are preserved in every position without exception and those that are preserved in only a few positions. The preserved ones include primarily the submorphemes {ap'-}, {ин1-}, {иц'-}, {от'-}, {#л-}, {ер-}, {ир-}, the elided ones include {#ц'2-}, {ськ-}, {#к1-}, {#к2-}, {ізм-/ізм-}, {ик-}, {ій-}, {іж-}, {ис-}, {ос-}, {ат-}, {ум-}, {ат-}, for example: бондар – бондарський, бондаренко, бондарівна, бондариха, бондарня, бондарка, бондарство, бондарювати та фашизм – фашист, алюміній – алюмінат, жрець – жриця. Thus, submorphemes, like morphonemes, play a significant role in the formation of the expression plan of derived words of the language [10]. In most cases, knowledge of the conditions of their functioning (and each speaker, according to J. Baudouin de Courtenay [21], “comes to this knowledge as psychophonetic associations accumulate and consolidate in his soul”) allows predicting either their appearance in derivatives as extenders of one of the components of the word-forming structure, or, conversely, their truncation. Psychophonetic associations refer to the connections between sounds and psychological or emotional states. These connections are formed based on experience and individual characteristics of perception, and can be both positive and negative. Psychophonetic associations represent a special case of general associative connections that arise in our consciousness. These connections can be formed based on similarity, contrast, sequence, or even random coincidence.

Each morphophonological position differs from the other in the mechanisms of adaptation of the morph-object to the requirements of the morph-subject (suffix). The morph-object is usually the root/stem of a derivative word. However, it happens that the suffix becomes it. This is provided that suffixal morphemes (native and borrowed) interact primarily with roots/stems of foreign origin.

The common Slavic suffix -ува- is characterized by high activity in noun word-formation nests, the morphonological type is the two-syllable form VCV. An essential feature of this suffix from the point of view of morphonology is that it does not require changing the final consonants of the examined verbs, and, therefore, ensures the readability of derivatives, primarily from the list of individual-authored ones: Князь Лев на старість теж монахував (I. Vovk). It is mostly stressed: in its original allomorph the segment а is accented: ворс – ворсувати, ворсування, ворсувальний, ворсувальник, while in the variant morphs – the first one: завуалювати – завуальований, завуалюй. The suffixes -н-, -ник can make the suffix -ува- (its allomorph -ів-) unstressed: мандрувати – мандрівний, танцювати – танцівник, and therefore they should be considered more powerful in terms of accent than the suffix -ува-.

In form, multi-element inventory suffixes come in three varieties: CVC, VCC, VCVC. CVC-variety suffixes form noun words – these are -ник, -чик, -щик, -чин-, -щин-: вухо – вушник, валюта – валютчик, барабан – барабанщик, козак – козаччина, Полтава – Полтавщина. VCVC-suffixes are tied to the system of adjective word formation: -уват- (горбок – горбкуватий), -овит- (талан – талановитий). VCC-variety units – these are both adjectival and noun suffixes: -енк- (куркуль – куркуленько), -оньк-/еньк- (коза – кізонька, зозуля – зозуленька; вишневий – вишневенький), -івн- (цар – царівна, лимар – лимарівна), -овн- (дух – духовний).

The factual material confirms the relevance of the caveat expressed by the Polish researcher Kowalik [19]: when predicting the morphonological structure of a derivative form, it is necessary to consider not only the nature of the junctional segments but also what morphological elements they belong to. Let us try to demonstrate this by the example of word-forming pairs: дівка – дівувати (genetically, undoubtedly, дівка – дівувати) and парубок – парубкувати. The bases of these word-forming pairs contain the phoneme /к/ in the final. However, its part in the structure of derivatives is not the same: the form дівувати does not contain it, but the verb парубкувати retains it. The morphophonological characteristics of other derivatives coincide, cf.: парубочий, парубоцтво, парубоцький, парубочити і дівочий, дівочий, дівоцтво, дівочити.. The morphonological non-identity of the similar derivatives дівувати – парубкувати can, as it seems, be explained by the fact that the submorpheme #к- in the word дівка belongs to a feminine noun, while in the word парубок it belongs to a masculine noun (cf. also етикетка – етикетувати).

The morphonological characteristics of derived forms are sometimes significantly influenced by the morphological features of their derivations and the grammatical class to which they belong. The validity of the expressed idea is evidenced, for example, by masculine and feminine nouns ending in -інь: гребінь, щербінь, корінь та глибокий, гладкий, бистрий. Despite the external (phonetic) similarity of these substantives, their inflectional and word-forming forms are morphonologically marked differently.

Derivatives of masculine nouns the tops of word-forming nests quite consistently exhibit the alternation i/e in appropriate conditions, for example, before the suffixes -ист-, -ев-, -аст-, -и-, -юват-; it also marks the inflectional forms of these nouns, cf.: гребінь/гребеня – гребеневий, гребенистий, гребенястий (but гребінчик, гребінець), корінь/кореня – кореневий, коренитися (but корінчик, корінець, коріннячко), щербінь/щербеня – щербеневий, щербенистий, щербенюватий (but щербінка).

It should be noted that the word-formation nest, its subunits (word-formation paradigms, word-formation chains) are today at the center of Ukrainian-language derivational studies – in particular, in the works of E. Karpilovska [15], M. Lesiuk [20], V. Greshchuk [11], as well as the younger generation of researchers, for example, L. Korzhyk [18].

It should be noted that quantitative parameters are a significant factor in linguistic evolution and the structure of language rules. In particular, the frequency of truncated forms correlates with the frequency of the word in the corpus (see Figure 3). The graph shows a clear ($r=0.74$) Zipf-type dependence:

$$y = a \cdot x^{-\gamma}, \quad (1)$$

Where y is – ratio of frequency of truncated forms to full forms,

x – frequency of the word (in both forms) in the corpus,

γ – exponent of power dependence,

a – dependency ratio.

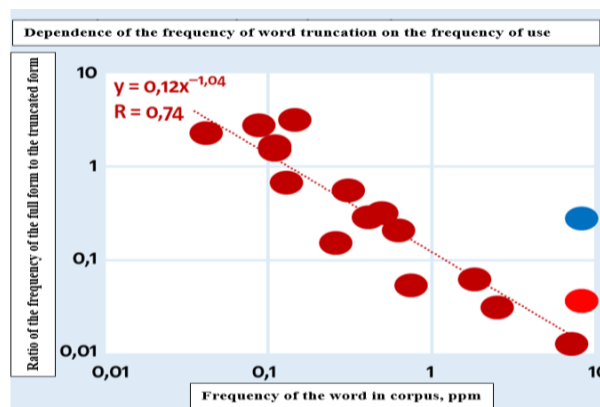


Fig. 3: Dependence of the Frequency of Word Truncation on the Frequency of Use.

For comparison, Polish utilizes numerous suffixes and alterations to change the meaning of words, especially in nouns, adjectives, and verbs. These changes often indicate grammatical functions like case, number, gender, and diminutive or augmentative forms. Suffixes like "-ek", "-ka", "-ik", "-ulek" create diminutive forms (making something smaller or cuter) while "-sko", "-isko" create augmentative forms (making something larger or more prominent). For example, "kot" (cat) can become "kotek" (small cat) or "kotisko" (big cat). Suffixes like "-nik" (e.g., czynnik - factor) and "-owa" (e.g., doktorowa - doctor's wife) are used to create various noun forms. Consonants can also alternate within a word's stem, especially in verb conjugations or noun declensions. For example: 1) noun: pies (dog) → piesek (small dog), psisko (big dog); 2) verb: budować (to build) → budowa (construction).

All current Slavic languages include stem-internal vowel-zero alternations in the paradigms of several of their nouns. These alternating vowels are historically known as 'yers,' and they all stem from the same historical source: high front and back vowels that are no longer found in current languages. In Polish, there are nearly minimal pairings of consonantal contexts that do and do not host vowel alternation, making simple phonological explanations of the phenomena unfeasible.

The formative compound, inserted externally in the form of a derivational affix or a zero affix ($\emptyset$), alters the word and determines its morphosyntactic properties, such as syntactic category, gender, number, and case. As a result, the suffix fulfills the same function as the morpho-syntactic head (see derivational suffix example below):

wyrw-i-rącz-ka ⁵² 'T-bar lift';	–ka: singular, feminine, nominative
dom-o-kraż-ca 'hawker';	–ca: singular, masculine, nominative
now-o-rod-ek 'new-born';	–ek: singular, masculine, nominative
skór-o-bi-cie 'whipping'	–cie: singular, neuter, nominative

At the same time, the term "morphological nest structure" refers to an ordered set of morphological models (schemes) used in the creation of derivatives of each degree of derivation. In the linguistic literature, the term "morphological structure of a word-inflectional paradigm" is similarly defined: the morphological structure of a substantive paradigm refers to the number of distinct stem types and how they are distributed among cases [7].

There is a distinction between specific (individual) and generalized (typical) morphophonemic structure. An individual morphophonemic structure records those morphophonemic models that make it possible to form derivatives of a particular nest. A generalized morphophonemic structure, on the other hand, characterizes not a separate nest, but a class (subclass) of nests; it records those transformations that are used (or can be used) to create derivatives from words of a certain morphophonemic variety. This means that the differences between typical and individual morphophonemic structures are not qualitative, but quantitative: not all morphophonemic schemes in an individual morphophonemic structure can be implemented, or their list may be richer than in a typical one.

It should be noted that the power of the nest shows dependence on the genetic characteristics of the vertex words: the nests of proper nouns are more richly developed, and not only at the 1st degree, but also in depth. Borrowed units can also form powerful word-forming complexes - This is determined by the relevance of the concept denoted by the corresponding noun, its role in the speech practice of society. The noun *niap* (PR) convincingly proves the above: having recently entered the Ukrainian language, it today actively produces derivatives: *niarчик, niarник, niap-технолог, чорноніарівський, niarити, niарювати*.

Thus, the conducted study of the morphophonological features of the formation of new words in the Ukrainian language confirms the presence of normative morphophonological positions. We see the prospect of further research in the word-formation morphonology of deverbatives of new words in the establishment of word-formation types of neologisms, the analysis of morphophonologically marked features of the roots of desubstantives, deverbatives, deadjectives of new words, and the determination of morphophonological models of new words in the modern Ukrainian language.

4. Conclusion

Modeling the cognitive nature of linguistic symbolism reflects the mental functions of the system as a process of categorization. Determining the motivated nature of the formative ability of the system, the symmetry of its structural properties, the creativity of the forms of representation of the knowledge reflected by the linguistic system and the structuring of speech activity, the systemic and functional uniqueness of the linguistic sign predetermines the mutual attraction of the actual and created reality as a contradiction of cognition. The exponent of any level of the linguistic system expresses its systemic and creative properties in the functioning of linguistic structures: the proto-formality of the semiotic ability ensures the integrity of the processes of cognition and reflection of the world in linguistic images, and the structures of signs themselves determine the degree of formal suggestion on the directions of their functioning in the aspect of semiotic methods of categorization possible logics of the formation of the generative sign ability.

In this context, the active expansion of the vocabulary of the language using word-forming potentials of derived and non-derived words arouses increased interest in those mechanisms that enable the coupling of word-forming morphemes at the final (after their selection) stage of derivational synthesis. Today, they are within the competence of morphophonology, a relatively young linguistic discipline that studies the patterns of formation of the expression plan of lexical units. The need for an exhaustive description of word-forming patterns to learn ways to enrich the dictionary at the expense of native language resources requires a detailed morphophonological analysis of the units available in the language, with the clarification of the reasons that determine the activation of the mechanisms of morphophonological transformations.

References

- [1] Albright, A., & Hayes, B. (2003). Rules vs. analogy in English past tenses: A computational/experimental study. *Cognition*, 90(2), 119–161. [https://doi.org/10.1016/S0010-0277\(03\)00146-X](https://doi.org/10.1016/S0010-0277(03)00146-X).
- [2] Ampa, A., Basri, M., & Ramdayani, S. (2019). A Morphophonemic Analysis on Affixation in The Indonesian Language. *International Journal of Scientific & Technology Research*, 8(7), 267–273.
- [3] Basbøll, H. (2015). Morphophonology. In: *International Encyclopedia of Social and Behavioral Sciences* (2. ed., pp. 826–833). Elsevier. <https://doi.org/10.1016/B978-0-08-097086-8.53036-0>.
- [4] Belth, C., Payne, S., Beser, D., Kodner, J., Yang, Ch. (2021). The greedy and recursive search for morphological productivity. arXiv preprint arXiv:2105.05790.
- [5] Bybee, J. (1995). Regular morphology and the lexicon. *Language and Cognitive Processes*, 10, 425–455. <https://doi.org/10.1080/01690969508407111>.
- [6] Bybee, J. (2001). *Phonology and language use*. Cambridge University Press. <https://doi.org/10.1017/CBO9780511612886>.
- [7] Dwivedi, P. (2017). Morphophonemics. In: T. Mukherjee (ed.), *An Introduction to Linguistics and Phonetics* (pp.1–12). UGC MHRD ePG Pathshala.
- [8] Fedurko, M. (2005). Morphology of adjective word formation in modern Ukrainian language. [PhD dissertation]. Kyiv: O.O. Potebnia Institute of Linguistics.
- [9] Fehrer, C. (2004). How Stable are Morphological Doublets? A Case Study of /schwa/ [similar] Ø Variants in Dutch and German. *Journal of Germanic Linguistics*, 16(04), 285–329. <https://doi.org/10.1017/S1470542704040425>.
- [10] Fromkin, V. et.al. (1990). *An Introduction to Language*. Harcourt Brace Jovanovich.
- [11] Greshchuk, V.V. (1995). *Ukrainian adjectival word formation*. – Ivano-Frankivsk: Play.
- [12] Haber, L. R. (1976). Leaped and Leapt: A Theoretical Account of Linguistic Variation. *Foundations of Language*, 14(2), 211–238.
- [13] Jensen, M. J. T. (1990). *Word Structure in Generative Grammar*. Amsterdam John Benjamins.
- [14] Josiah, U., & Udoudom, J. (2012). Morphophonemic analysis of inflectional morphemes in English and Ibibio nouns: Implications for linguistic studies. *Journal of Education and Learning*, 1(2), 72–81. <https://doi.org/10.5539/jel.v1n2p72>.
- [15] Karpilovska, E.A. (1990). *Construction of complex word-forming units*. Kyiv: Naukova Dumka.
- [16] Kirov, Ch., & Cotterell, R. (2018). Recurrent neural networks in linguistic theory: Revisiting pinker and prince (1988) and the past tense debate. *Transactions of the Association for Computational Linguistics*, 6, 651–665. https://doi.org/10.1162/tacl_a_00247.
- [17] Klymenko, N.F. (1998). *Fundamentals of morphemics of the modern Ukrainian language*. Kyiv: IZMN.
- [18] Korzhyk, L.I. (1999). Structural and semantic typology of adjective word-formation chains in the modern Ukrainian literary language. [PhD dissertation brief]. Precarpathian State University, Ivano-Frankivsk.
- [19] Kowalik, K. (1998). *Morfologia. Gramatyka współczesnego języka polskiego. Morfologia*. Warszawa: PWN.
- [20] Lesiuk, M.P. (1991). Word-forming nest as an object of word-formation research. Word-forming and semantic structure of the Ukrainian lexicon. Lviv,
- [21] Mahero, E. (2012). *Regional morphophonemics: English Luhya loan words*. LAP LAMBERT Academic Publishing.
- [22] Mirbostani, S., Mirroshandel, S., & Rambow, O. (2023). Deep Active Learning for Morphophonological Processing. Proceedings of the 61st Annual Meeting of the Association for Computational Linguistics Volume 2: Short Papers, pp. 793–803. <https://doi.org/10.18653/v1/2023.acl-short.69>.
- [23] Narasimhan, K., Barzilay, R., & Jaakkola, T. (2015). An unsupervised method for uncovering morphological chains. *Transactions of the Association for Computational Linguistics*, 3, 157–167. https://doi.org/10.1162/tacl_a_00130.
- [24] Nurhayati, D.A.W. (2011). Morphological and morphophonemic process (nature, types, and rules). *Lingua Scientia*, 5(2), 175–186.
- [25] O'Grady, W., Dobrovolski, M., & Aronoff, M. (1993). *Contemporary linguistics: An introduction*. St Martins Press.
- [26] Parera, J.D. (1982). *Studi Linguistik Umum dan Historikal Bandingan*. Jakarta: Erlangga.
- [27] Pierrehumbert, J. (2001a). Stochastic phonology. *GLOT*, 5(6), 1–13.
- [28] Pierrehumbert, J. (2001b). Why phonological constraints are so coarse-grained. *Language and Cognitive Processes*, 16(5–6), 691–698. <https://doi.org/10.1080/01690960143000218>.
- [29] Ramlan, M. (2001). *Morphology: Suatu Tinjauan Deskriptif*. Yogyakarta: CV. Karyono.
- [30] Round, E. (2023). Morphophonology: lenition and assimilation. In: C. Bower (ed) *Oxford Guide to Australian Languages*, OUP. <https://doi.org/10.1093/oso/9780198824978.003.0012>.
- [31] Säily, T. (2011). Variation in morphological productivity in the BNC: Sociolinguistic and methodological considerations. *Corpus Linguistics and Linguistic Theory*, 7(1). <https://doi.org/10.1515/clt.2011.006>.
- [32] Thornton, A. M. (2012). Overabundance in Italian verb morphology and its interactions with other non-canonical phenomena. In H. Otsuka, A. Urdze, J. van der Auwera, & T. Stolz (Eds.), *Irregularity in Morphology (and beyond)*. <https://doi.org/10.1524/9783050059587.251>.
- [33] Volyanska, E. (2014). Morphological positions in new words of the modern Ukrainian language. *Scientific Journal*, 2, 32–41.