

ETYMOLOGY OF GERMAN WORDS AND THEIR MEANING IN MODERN GERMAN

NATALIJA KOLJADA¹, TATIANA OVSIENKO²,
OXANA LOMOVA³, SVETLANA SHAPOSHNIKOVA⁴

Abstract. This study is the analysis of the history and genesis of German words starting from their oldest forms. The purpose of this study is to delve into the original form of words, their linguistic origins, changes in meaning, and their usage in modern German. The study applied etymological analysis to trace back the origin of the earliest meaning of the word and compare it with its resulting meaning. The use of etymological research methods showed the key role of the derivational aspect in etymological analysis, especially when it comes to the origin of compound words in the German language. The formation of compound nouns in German is a unique phenomenon since German is the only language that can combine two or more words to form a new one (vivid examples are the words denoting chemical compounds). Identifying the constituents of a word means understanding its etymology. The research data were obtained through the analysis of several dictionaries of the German language. The results of this study can be exemplified by such words as *Ameise*, *Heim*, *Mensch*, etc., as well as such compound nouns as *Handschuh*, *Briefträger*, and many others. The practical value of the findings lies in their contribution to the ongoing discourse on the persistence of linguistic roots. In addition, the findings have practical implications for translation and intercultural communication. The data may also be useful for researchers interested in etymology.

Keywords: etymological features of German words; etymology truth criterion; intercultural heritage; morphological; semantic analysis; word origin; word-formation.

1. INTRODUCTION

While being studied, the objects and phenomena of the environment come to be nominated in language and start being used in human speech. Words determine not only the nature and properties of objects and phenomena but also the process of their development

¹ Department of German Philology, Southern Federal University, Rostov on Don, Russian Federation, natkoljada@rambler.ru, natkoljada@sfedu.ru.

² Department of German Philology, Southern Federal University, Rostov on Don, Russian Federation.

³ Department of German Philology, Southern Federal University, Rostov on Don, Russian Federation.

⁴ Department of German Philology, Southern Federal University, Rostov on Don, Russian Federation.

reflected in human activity (Krosch 2004). As a social phenomenon, language reflects the system of values. It reveals the world of a different culture, whose type determines the nation-specific style of verbal communication, the distinctive features of communicative behavior, normative etiquette, and social norms (Fix 2002; Hämmerling 2005).

The first studies in this field focused on collecting material for etymological dictionaries to elucidate the meaning of words (Hentschel 2016; Kluge 2015; Kluge and Seebold 2011; Knipf-Komlósi *et al.* 2006; Köbler 2014; Pokorny and Partridge 1969). Only with the emergence of a comparative method in linguistics, the concept of etymology was introduced into scientific usage and the first etymological studies were conducted. Today, the origin of words is considered in terms of their word formation (Genaust 2017; Wahrig 2009), morphological composition (Fleischer and Barz 2012; Schroeder and Schmid 2016), semantics (Booij *et al.* 2000; Busse 2005; Willer 2015), and phonetics (Zulpukarov *et al.* 2021).

The comparative-historical method of studying various lexical units underlies the etymological methodology based on the laws of phonetic, and morphological changes, as well as on the derivational and lexical levels of the language (Gsell 2013). The main objective of etymological research may be to identify the metaphorical image symbols underlying the meaning of the German word (Lühr 2017). Some scientists believe that etymological research discovers semantic motivations for the way to designate a word (Zulpukarov *et al.* 2021). Others rely on the general educational aspect of etymological research and insist on studying the word-formation pattern first. The latter guarantees that the found etymological solution is reliable (Warbot 1990).

Practical linguists have established the consistency and harmony of the German language system (Klein 1998; Kolyada 2004). It is crucial to study the etymology of German words and their meaning in modern German. Firstly, it offers valuable insights into the historical and cultural context of German-speaking communities (Etzensperger 2018). Research into the origins of words can reveal the language's evolution over time and the influences that have shaped it. This information provides a deeper understanding of the linguistic processes that have impacted modern German. Additionally, the study of the etymology of German words aids in understanding how their meanings have evolved. By examining semantic changes, researchers can gain insights into historical events, cultural shifts, and societal developments that have influenced these transformations. In this context, research has focused on the concept of sense polarity, which refers to a change in meaning, specifically a shift in the positive or negative connotation of a word's meaning over time (Pan 2021).

After nearly two centuries of extensive etymological research, there is a well-established understanding worldwide that words that originated in antiquity have retained their meaning in modern German. This strong connection between historical origin and modern usage forms the basis of this study. It remains relevant for research practice to delve into the word formation of compound nouns in German to shed light on how these words have retained their meaning over the centuries.

The purpose of this study is to delve deeper into the original form of words, their linguistic origins, changes in meaning, and their usage in modern German. This analysis aims to reveal semantic shifts and explore the historical and cultural contexts that have influenced

changes in word meanings. This analysis may broaden the understanding of how words and their meanings have evolved. To achieve this goal, the following tasks must be solved:

- analyze how German words originated (since antiquity);
- compare the original meaning of the studied words and their meaning in the modern language;
- analyze the origin and meaning of compound nouns formed as a result of word addition.

2. LITERATURE REVIEW

Multiple etymologies, uncertain etymology, and loanword dynamics are concepts that provide important insights into the complexities and richness of language evolution. The existence of multiple etymologies for a single word is a common occurrence (Arnold 2022). It arises from the historical development of languages, cultural exchanges, and linguistic influences. Instead of causing confusion, recognizing multiple etymologies allows researchers to understand the diverse origins and layers of meaning within a word. The criterion for achieving mutual understanding between people who speak different languages is the fact that our ideas about the world around us correspond to the actual status quo (Herbermann 1981). In the course of their practical activity, humans have always relied on logic in their perception of the world. In their attitude to nature, people have sought, based on their needs, to grasp the meanings of objects, their properties, and their interactions. The ability to work out the meaning of an object, its properties, and its relationship with other objects is the so-called process of actual practical semantization (Lühr 2017).

Each section of linguistics deals with a narrow specific problem. Etymology is the section of linguistics that studies the origin of a word and its changes over time. The term "etymology" has been firmly established in the field of linguistic discipline. However, the scope of research, both in terms of its quality and quantity, has reinforced the tendency to treat etymology as an independent science with its object, goals, and research objectives (Esemuratov 2017; Kuznetsov 2006; Otkupshchikov 2001). Words that have undergone various kinds of changes, whether phonetic, morphological, derivational, or semantic, make up the subject matter of the analysis. In the process of the analysis, it is necessary to identify the etymon (Ancient Greek etymon – "truth, the true meaning of the word"). The above is the main task of etymology as a science.

Within the framework of linguistics, etymology studies the emergence and historical changes of words caused by individual phenomena of social change in the language. These data are reflected in etymological dictionaries (Kolyada 2009; Zlobinska-Görtz 2018). Everyday and non-scientific etymological studies manage to preserve the normative character of early etymology to a certain extent. The history of words shows that a certain modern usage may be incorrect. In some cases, it does not comply with historical usage or rests on the obvious process in which the word takes on a new meaning (Ghanem 2019).

Researchers believe that the main task of etymological analysis is to reveal the history of words, based on their oldest forms and meanings. Accordingly, the methods, techniques, and procedures of the comparative historical method make up the basis of the complex analysis (Rahmani 2020). Moreover, etymology is a part of historical linguistics, which includes a set of such means of analysis as word formation, morphology, lexicology,

semantics, and other areas of linguistics (Gsell 2013; Smirnov 2021). Many scientists also emphasize that, in comparison with other branches of linguistics, etymology is closely connected with the cultural and historical aspects of language (Zulpukarov *et al.* 2021). This science aims to discover the true meaning of the word at the moment of its emergence (Anikin 2007; Campbell 2013; Zulpukarov *et al.* 2021).

However, among the theorists of etymological research, there are different points of view on the task of an etymologist. Some scientists insist that it is necessary to find the original pattern that created a word and define its concept (Durkin 2015). Wartburg believed that it was necessary to trace the entire history of the word and changes in its meaning. Other scientists reject the idea that etymology might mean the history of the word since this deprives etymology of the right to be treated as an independent branch of historical lexicology (Matyash 1988).

Loanwords, or borrowed words from other languages, are integral to language dynamics. They result from cultural interactions and globalization, contributing to the expansion and enrichment of vocabulary (Abaev 2007). The main goal of the etymological analysis of borrowings is to identify the source of a particular loan word. In recent years, numerous borrowed blends have emerged and become introduced in new terms. A notable example is the term “Denglish” (Denglisch), a portmanteau word that results from blending a German and an English root; it has come into widespread public use (Tsintsiruk 2022). It is extremely difficult to establish the exact origin of the word. Therefore, the etymology of words can be both true (absolutely reliable, indisputable) and hypothetical (presumptive, problematic), depending on the origin and history of a word (Warbot 1990). The etymological analysis compares and contrasts a word's etymon in different languages but still does not trace the origin of this word beyond any doubt. This principle underlies the way of compiling various etymological dictionaries (Rask 1992; Timoshilova 2005).

3. MATERIAL AND METHODS

3.1. Research Design

The research methods employed in the study (etymological analysis, derivation analysis, and linguistic analysis with observation) are related to the nature of the problem itself. The methodology rests on etymological analysis, a linguistic method involving tracing the origin and historical development of words. This study employed etymological analysis to investigate the original form of words, their linguistic origins, changes in meaning, and their usage in modern German. The work lasted for 2 years and went through three stages: observation focused on the frequency of usage of the modern-German words selected for research; generalization of the observation results; and interpretation of the findings. The latter involved the scrutiny of the meaning and usage of words in modern German and the analysis of differences between the meaning in modern language and the original meaning that the words took on in antiquity.

3.2. Sample

The study employed a multi-stage research design and utilized various dictionaries and linguistic resources. The dictionaries included the etymological dictionary of German

words (Buchi 2016), phraseological dictionaries: Duden, Redewendungen (Hacken 2018), Duden Redensarten: Herkunft und Bedeutung: Wo sie herkommen, was sie bedeuten (Duden 2014), Deutsche Idiomatik: Wörterbuch der deutschen Redewendungen im Kontext (Worsch 2002). The established etymological dictionaries, such as Wolfgang Pfeifer's "Etymologisches Wörterbuch des Deutschen" are valuable resources. Nevertheless, additional etymological analyses of German words can still bring novel insights and perspectives. Etymological research is an ongoing process, and new analyses may refine or contribute to the existing knowledge base. Language evolves and the meanings of words may be subject to new interpretations. Moreover, this research can expand the corpus of the studied words. Some words may remain insufficiently analyzed.

3.3. The Procedure of Etymological Analysis

In the first stage, the study used the method of continuous sampling to select and accumulate the words for the analysis. The selected words have long been rooted in the modern German language and have not undergone any further changes in terms of their meaning, phonetic design, and grammatical categories. Explanatory, etymological, and phraseological dictionaries were the main tools at this stage. The words were selected in alphabetical order so that it was possible to find 1-2 words with ancient origin for each letter of the German alphabet. Most of the words were single-root words, the total number amounted to 120 units. There were some limitations in the choice of words, as the purpose was to analyze the most common words in modern German. This analysis identified the parts of speech, the lexical meaning, and the word stems of the words. The second stage was the etymological analysis of the selected words. The analysis makes it possible to trace the original form, reveal the origin of a word, identify the language it was borrowed from, its further changes in meaning, and its usage in the modern language (Koester 2007; Turabaeva 2022). The etymological research revealed that words were equated with the same root bases (stems) as other words qualified as the primary source etymon of Old High and Middle High German, as well as other Indo-European languages. Etymologically, most of the etymons refer to the lexemes of ancient Greek and Latin origin. In the third stage, the study used the derivation analysis to fully understand the meaning of the studied words.

The lexical units that retained their original meaning were used to translate each lexeme on a case-by-case basis. Then the meaning of the original words was examined by integrating the meanings of individual lexemes. In conclusion, idioms, phrases, and phraseological units belonging to the lexical group in question were selected from the phraseological dictionaries of the German language. Proceeding from the contextual analysis of these expressions, the authors put forward their translations and compared them with the original meaning of the words.

3.4. Results and Discussion

The conducted research showed that the principle of comparison with other languages applies to explaining the origin of a word, for example:

Ameise 'ant' – West German name of the insect (from Middle High German *āmeiȝe*, from Old High German *āmeiȝa*, from Middle Low German *ēmete*, from English *emmet*). Ant refers to the verb *meiȝen* from Middle High German; Middle High *meiȝan* means "(from)cut/

(about)to cut; to cut”. The prefix of Middle High German, Old High German *ā* means “away, forward”. The ant is dubbed “Circumcised” because of the sharp incision between its head, thorax, and abdomen.

Appetit ‘appetite’ means “the desire to eat, hunger, need”. The word was borrowed in the 15th century from the Latin-Prussian *appetitus*, “the need for food”. The underlying verb of Latin origin *ap-peters* (to be satisfied with something, to demand, to ask, to crave, to crave) is a derivation from the Latin *petere* (meaning something that should be tried to achieve), which is etymologically related to the German word “feather”.

Blatt ‘leaf’ is the Old Germanic word of Middle High German, Old High German *blat*, Dutch *blad*, English *blade*, Swedish *blad* refers in their meaning of “blooming, blooming” to a group of words represented by the meaning of “bloom”. The already attested Middle High German meaning of “a leaf in a book” was influenced by the Latin *folium* (*Folio*). The word also denotes some other thin and flat things, such as the blade of a sword, knife, axe, saw, etc.

Brauchen ‘to need’ is an Old Germanic verb associated with Middle High German *brüchen*, Old High German *brühan*, Gothic *brūkjan*, Middle Dutch *brüken*, Old English *brücan*. It is related to the Latin *fructus* (“harvest, fruit, fruit”). The main meaning is “to eat”, while the generalized meanings include “to eat, to consume food, to enjoy something, to participate in something; to use, to apply”. Finally, such meaning as “to need, to need something badly” is related to the usage of *brauchen* as a modal verb adjoins.

Charakter ‘character’ is an individual trait, originality, a set of defining features; a person with certain pronounced essential features; font signs. The word was borrowed in the Middle High German time (*karacter*) from the Latin *character* “burnt brand; a witchcraft sign; sign, a peculiarity”. Initially, the word was used in the sense of “engraved font sign; witchcraft sign; witchcraft spell; sign, omen”. The transfer of qualities stamped into the human soul occurred under the influence of the French *caractère* in the 17th century. The Latin *character*, in turn, comes from the Greek *charaktēr* “tool for engraving; engravings, stamp, seal; sign, letter, sign, feature, peculiarity”.

Damals ‘then’ is an adverb attested since the 16th century (Middle High German *māles* “this time; then”) refers to *da* and *Mal*; derived *damalig* (17th century).

Erde ‘earth’ is a common Germanic noun, including Middle High German *erde*, Old High German *erda*, Gothic *airpa*, English *earth*, Swedish *jord*. It correlates with related words of Indo-European languages and Greek *érā* “Erde” (*érase*, “zu Erde”), Old Icelandic *jorfi* “Sandbank”. The word originally meant “earth” as a material (wet, black, scorched earth, etc.) Later on, the word “earth”, in contrast to “sky”, begins to mean land inhabited by man and then becomes the name of our planet.

Freitag ‘Friday’ is the Old German designation of the sixth day of the week (from the Middle High German *vritac*, Old High German *frai-*, *frijetag*, Dutch *vrijdag*, English *Friday*, Swedish *fredag*). It is, as well as the names of other days of the week, a borrowed translation. The name derives from the name of the goddess Frija (wife of Wodans (Odin), Old High German *Fri[i]a*, Old Icelandic *Frigg* (literally “beloved”; *frei*)), which the Germans equated with the Roman Venus.

Genug ‘enough’ is the common Germanic word of the Middle High German *genuoc*, Old High German *ginuog*, Gothic *ganōhs*, English *enough*, Swedish *nog* refers to a Germanic group of words of the Gothic *ganauhan* (*reichen* in German). This group of words goes back together with related words from other Indo-Germanic languages to the Indo-Germanic root *[e]nek* – “to be sufficient, to achieve; to bring, to bear”.

Heim ‘house’ is a common Germanic word of Middle High German, Old High German *heim* “Haus, Wohnort, Heimat”, Gothic *haims* “Dorf”, English *home* “Haus, Wohnung, Aufenthaltsort, Heimat”, Swedish *hem* “Haus, Wohnung, Heimat”. It is related to words in other Indo-Germanic languages, for example, Greek *komē* “Dorf” and Baltoslav “genus, clan” derived from the Russian *sem’ja* “family”, is a derivation of a noun from the Indo-Germanic root *kei-* “liegen” and originally means “a place where people settle, a camp”.

Ich ‘I’ – The common Germanic personal pronoun of Middle High German *ich*, Old High German *ih*, Middle Low German *ik*, Gothic *ik*, English *I*, Swedish *jag* narrows down, together with its counterparts in other Indo-Germanic languages (for example, Greek *ego*[n] and Latin *ego*), to Indo-Germanic *egom*, eg[o] “ich”. Cases other than the nominative case of the personal pronoun are formed from other stems (words). The substantivized form of the personal pronoun has a neuter gender, for example, *das bessere Ich*.

Jacke ‘jacket’ – The name for the piece of clothing was already borrowed in the Middle High German time from the French *jaque* “tight, short outerwear with sleeves, bulletproof vest”. It presumably refers to the French *jacques*, a nickname for a French peasant, because this garment was mostly worn by peasants. The nickname is almost identical to Jacques “Jakob” because this name was popular among peasants.

Käfig ‘cage’ is a West Germanic noun (Middle High German *kevje* “bird cage, cage”, Old High German *chevia*, Dutch *kevie*) based on a borrowing from the Latin *cavea* “cage, case, vessel”. The same origin is a loanword from the Low German *Koje*.

Legende ‘legend’ – Attested from the period of Middle High German time, borrowed from the Middle Latin *legenda* – “many middle genders passages (from the book) that should be read”. It first appears in the church lexicon in the meaning of “reading the life of the saint; the story of the saint”. In the 16th century, “an unreliable message, an unreliable story” derives from this meaning. The Middle Latin *legenda* refers to the Latin *legere* “to read”.

Mensch ‘man’ is a word limited to the usage in the German and Dutch area of the language (Middle High German *mensche*, Old High German *mennisco*, later *mannisco*, Dutch *mens*). It is a substantivization of the common German adjective Old High German *mennisc*, Gothic *mannisks*, Old English *mennisc*, Old Icelandic *mennskr* “human, masculine” (menschlich, männlich). This adjective is borrowed from the noun meaning “man” (Mann). Along with the masculine gender, the neuter gender *das Mensch* is also common today, but is used contemptuously for “woman, dame, old biddy”, dialectal also for “Mädchen, Geliebte, Ehefrau”. The word of the neuter gender was already used in the Middle High German times and originally had the same meaning as the word of the masculine gender. Then it was used specifically in the sense of “Dienstbotin, Magd; Geliebte”, and only in the 17th century acquired a contemptuously neuter gender.

Neffe ‘nephew’ – “Bruder, Schwestersohn”: Old Germanic definition of kinship, Middle High German *neve*, Old High German *nevo*, Dutch *neef*, Old English *nefa*, Old Icelandic *nefi*; together with related words from other Indo-Germanic languages, on Indo-Germanic *nepōt* – “Enkel, Neffe”, compare, for example, Ancient Indian *npptt* “Enkel, Nachkomme” and Latin *nepos* “Enkel[kind]; Neffe”. The Indo-Germanic word is presumably made up of the connective particle *neß* (compare nicht) and *poti-s* “Herr, Gebieter” (potential) and literally means “minor”.

Oder ‘or’ – The New High German disjunctive conjunction goes back to the Middle High German *oder*, Old High German *odar*. This form was obviously formed under the influence of the above-mentioned words *aber* and *weder* – from the Middle High German *od[e]*, the Old High

German *odo*, later *eddo*. The Old High German *eddo* corresponds to the Gothic *aippau* “oder” and the Old English *edda* corresponds to *odde* “oder” (hence the English *or*).

Pfahl ‘pillar’ is a Middle Germanic noun (Old High German *pfāl*, Old High German *pfāl*, Dutch *paal*, English *pole*, Swedish *påle*) based (together with other special words denoting elements of Roman architecture) on an early borrowing from the Latin *palus* “Pfahl”. The Latin word meaning “a tool for strengthening” (*palus* “pāk-slo-s”) to the basis of the Latin *pangere* (*pactum*) “to strengthen, drive in”. The foreign word *Palisade*, a foreign word, rests on the Romance derivative of the Latin *palus*.

Rübe ‘beetroot, turnip’ is the Germanic name of a plant of Middle High German *rüebe*, Old High German *rouba* (as well as Middle High German *rbebe*, Old High German *rbaba*), Middle Dutch *rouve*, Swedish *rova* is related to the Greek *rhpp[h]ys* “Rübe”, Latin *rapa*, *rapum* “Rübe” (rapeseed and kohlrabi) and to the Baltoslavian variety of the Russian *repa* “Rübe”. Obviously, it implies the old “wandering, moving” word.

Sonne ‘sun’ is a common Germanic noun of Middle High German *sunne*, Old High German *sunna*, Gothic *sunno*, English *sun*, Old Icelandic *sunna*. The word is in line with the Indo-Germanic n-gender, while the Gothic *sauil* “Sonne” and the Swedish *sol* “Sonne” continue the l-gender. It is based on the Indo-Germanic *suuel* “Sonne”, compared to, for example, words from other Indo-Germanic languages Latin *sol*, Lithuanian *sululė* and Greek *helios*. In Germanic languages, “sun” is usually feminine.

Teig ‘dough’ – The common Germanic word of Middle High German *teic*, Old High German *teig*, Gothic *daigs*, English *dough*, Swedish *deg* refers together with related roots from other Indo-Germanic languages to the Indo-Germanic root *dheigh* – “to knead clay and work with it; Teig kneten”. It is possible to compare, for example, Latin *figere* “to knead, shape, form, invent (fingeren)”, Latin *figura* “education, image, phenomenon”, Ancient Indian *dhaha-h, -m* “body”, Greek *techchos* “Mauer”, and Greek *tochchos* “Wand”.

Und ‘and’ is a West Germanic conjunction of Middle High German *und[e]*, Old High German *unta*, *unti*, later *enti*, *anti*, Dutch *en*, English *and*. It is related to the area of Germanic languages, to Old Norse *en[n]* “auch, und, aber”, and has no definite origin. Perhaps there is some relationship with the ancient Indian *ththa* “darauf, dann”.

Valuta ‘currency’ – The designation for “price, value, equivalent; money, means of payment for foreign currency” was borrowed in the 16th century into the language of merchants from the same meaning of the Italian *valuta*. This is a derivative from the Italian *valere* (*valuto*) “to be considered (to be valid), to be valuable”, which is based on the Latin *valere* “to be strong; to be valid, to be able”. The same group (Latin *valere*) also includes the Latin adjective *validus* “strong, healthy”, the opposite meaning of which Latin *invalidus* “powerless, weak” is the basis of the Russian loanword *invalid* [e].

Widmen ‘to dedicate’ – The verb of the Old High German *widemen*, Old High German *widimen* comes from the noun in the meaning Wittum of the Middle High German *wideme*, Old High German *widimo* “dowry of the bride, property of the church”. Literally, it means “to provide gifts”. In the New Upper German period, it evolved into a new meaning of “to dedicate as someone festive, for someone or something to define”.

Zeile ‘row, line’ is a noun of the Middle High German *zele* limited by the area covered by the spread of the German language, the Old High German *zila* “row, line”. Obviously, the word refers to the group of words used at that time. It means “separated, divided row”. Initially, the word *Zeile* used to mean “a row of houses, a street”. Since the 16th century, *Zeile* has acquired the meaning of “a written or printed series of words”.

Thus, the above-mentioned examples confirm that the etymological analysis of words reveals the history of words, starting with their oldest forms and meanings. Using techniques and procedures of the comparative historical method, the analysis also covers the facts of related languages. The history of words reveals aspects of material and spiritual culture, which developed at a certain historical period. This study analyzed lexemes and subdivided them into semantic, root (stem-based), affixational, and lexico-semantic groups.

In this regard, in the process of etymological research, the phonetic aspect was initially viewed as central (under the influence of Neogrammarians). However, some researchers were opposed to emphasizing phonetics and to a disdainful attitude to national, semantic bonds. For example, J. Grimm studied the Gothic-Germanic languages and focused on the correlation of forms and sounds of similar or related languages in diachrony. The author used the example of various dialects. He underlined that strong German verbs of the strong conjugation are older than the weak verbs and considered the internal inflection to be older than the external one. It is necessary to note that at the time of Voltaire, the etymology of the word rested on similar phonation (Sternin and Rosenfeld 2008).

The above etymologically examined examples confirm that many words can be explained without going beyond the framework of individual languages, just proceeding from their word-formation formants. The analysis showed that monosyllabic words (which make up the greater proportion of the adduced examples) do not have a developed inflectional ending. This fact practically excludes the possibility of using the comparative historical method of etymological substantiation. In this case, typological, linguo-geographic, and areal-linguistic methods, as well as the method of semantic parallels seem the most appropriate (Schemann 2011).

In the course of their research, etymologists successfully apply the method of verifying the correctness of etymology, according to phonetic, word-formation, and semantic criteria (Warbot 1990). In this respect, it is necessary to mention the research by Greenberg, Benveniste, Redard, and Chantren. They introduced some elements of structural analysis into the field of word formation to obtain information about the root (stem) of the word (Otkupshchikov 2005).

The existing etymological dictionaries rest on just the same principle: the comparison of the roots of words in related languages. However, there is an opinion that not all of these dictionaries have the necessary degree of reliability. For example, in the “Etymological Dictionary of the Modern German Language” by Professor Makovsky (Makovsky 2004), the author employs both linguistic and cultural-historical methods of etymologization. The reliability of this study is questionable. Although it uses almost 150 Indo-European languages for substantiation, all etymological solutions belong solely to the author who compiled the dictionary. This fact is a considerable limitation since sometimes the criteria of truth in the process of etymological research are substituted with intuition.

The current analysis points to the fact that a significant proportion of headwords qualified as loanwords in the entries of etymological dictionaries require a more in-depth etymological analysis. The total of 120 words were selected for the study, whereas the article focuses on the analysis of the usage of 25 words from the etymological dictionary (Booij *et al.* 2000) in modern German. The highlighted units indicate that these words have retained their primary meaning up till now. Thus, for example, the word **Ameise** – ‘ant’ is called “circumcised” due to the appearance of this insect, with a body as if made up of separate parts. Accordingly, today, this word denotes, revealing its inherent qualities, a “city-forming, urban-

planning” insect, as well as a “hoist vehicle/forklift” (colloquial). In modern language, this word has also acquired a somewhat exaggerated meaning, such as “hymenoptera” (Hautfügler), “floor conveyor” (Flurfördergerät), vehicle (Transportmittel) (Wettig *et al.* 2012).

The word **Blatt** – a ‘leaf/sheet’ retains its primary meaning in new word formations – a leaf of a deciduous tree (Laubblatt) or a leaflet (Flugblatt). It is used in the titles of newspapers consisting of sheets (“Berliner Tagesblatt”), as well as to identify the creators of various publications (Oliver Wurm, Andreas Volleritsch, Matthias Gegner) – Blattmacher. In addition, in modern German, there are phraseological units with the word *Blatt*: das Blatt/das Blättchen hat sich gewendet (things have taken a different turn, the situation has changed), ein unbeschriebenes Blatt sein (used figuratively as a “blank sheet”), zwischen die beiden passt kein Blatt Papier (this expression is used when there is no disagreement between people), kein Blatt vor den Mund nehmen (to openly express your opinion), das steht auf einem anderen Blatt (this is not relevant) (Hacken 2018; Koester 2007).

As it has been mentioned above, Latin and Greek had a great influence on the development of many languages. In science, religion, and philosophy, the German language uses numerous notions originating from the Greek language, and, in particular, the word “era” which evolved from “Ero” through “Erdo” to the eventual modern form of “**Erde**” – ‘earth’. In modern German, this concept now denotes “arable land, field” (Ackerland, Feld). The adjective *irdisch* based on this word acquired the meaning “Die irdische Welt, das irdische Leben” – the earthly world, worldly life, and “Erdkugel” – the globe of the earth, the whole planet. Moreover, the word became widely used in phraseological units: sie liegt schon seit Jahren unter der Erde (she has been dead for many years); Solange ich über der Erde bin, geschieht dies nicht (while I am alive, this will not happen); mit beiden Beinen, Füßen auf der Erde stehen (stand firmly on your feet in this world); das war für mich die Hölle auf Erden“ (it was unbearable, terrible) and many others (Hacken 2018; Worsch 2002).

The word “**Hei**” ‘house’ has not lost its meaning since ancient times. However, now it places great emphasis on the ideas of “native home” and “native dwelling”. In the old days, a proverb Trautes Heim – Glück allein (Home is exceptional happiness) used to be embroidered, framed, and put on the walls of the living room. Nowadays, this proverb has an ironic connotation. In the meaning of the *native home*, *the hearth* this word is also part of the idiom Heim und Herd (Duden 2014).

The meaning of the word “**Käfig**” ‘cage’ has retained its primary meaning in modern German. At the same time, it has acquired several synonyms, for example, Gehege (reserve), Zwinger (hist. prison), cage (for animals), Voliere (aviary for birds), Bauer (cage for birds), and also in a figurative sense – vessel, tank, cistern; jewelry box, chest, casket. However, in proverbs, the word has not lost its original meaning: in einem goldenen Käfig sitzen, aus dem goldenen Käfig ausbrechen – to sit (languish) in a golden cage, to break out of a golden cage (Hacken 2018). The meaning of the word “**Legende**” ‘legend’ indicates the original function of this word, namely, reading the lives of the Saints aloud. Subsequently, this word has acquired the meaning not only of an oral message but also of a written one. In its semantic structure, the “legend” is similar to the meaning of “narrative or epic”. It may have non-religious meaning and refer to messages about Saints. In addition, “**Legende**” has gained ironic connotations in anecdotal stories about celebrities. There are religious legends and folk legends (epics, folk tales) endowed with a historical core. In these legends, a famous figure acts in the foreground, and in folk legends, an exaggerated idea of historicity appears in the background (Wettig *et al.* 2012).

“**Mensch**” ‘man’ is a word originally denoting “a man of the masculine gender”, later acquires the meaning of “a living being”, “a separate individual”. The synonym for this word “Homo sapiens”, introduced by Karl von Linne, was recognized in the XVIII century as a scientific term. Until the middle of the XX century, “modern man” had been referred to that way. Today, the meaning of man as Homo sapiens is considered obsolete (Wettig *et al.* 2012). Moreover, in the meaning of “man as a living being”, the word Mensch is used in set phrases and proverbs, for example: Der Mensch denkt, Gott lenkt; Der Mensch lebt nicht vom Brot allein; Was Gott zusammengeführt hat, soll der Mensch nicht scheiden (Hacken 2018; Worsch 2002).

The usage of “**Zeile**” ‘row, line’ in the modern language (the word has been used since the IX century), as well as its synonymous meaning of “Reihe” and “Linie”, has acquired the meaning of “string” in some expressions: Zwischen Zeilen lesen (read between the lines); Vielen Dank für Ihre Zeilen (thank you for your lines (letters)); Diese letzten Zeilen hatte ich damals rot gestrichen (I underlined in red these last lines). Like many German words, the word “Zeile” forms compound nouns, such as Häuserzeile (Häuserreihe) – a row of houses; Schlagzeile – large headline (in the newspaper); Verszeile – a line of verse (Worsch 2002).

In the process of its formation, the adverb “**genug**” ‘enough’ has always been spelled in the same way. It has not lost its primary meaning “enough” in modern German. In this meaning, the word is part of fixed expressions, such as Genug des Guten! (a little bit of good!); Er hat sich selbst genug (he has his own head on his shoulders); Ich haben genug (davon) (I have had enough, I am tired of it) (Hacken 2018; Worsch 2002).

The compositional conjunction “**oder**” ‘or’ is still used today in its primary meaning “or”. It has several synonyms – *mit anderen Worten* (in other words), *das heißt* (that is), and is used as part of double disjunctive conjunctions: *entweder...oder* (or...or), *oder aber*, *oder auch* (or, as well); *so oder so* (one way or another; anyway); *oder nicht?* (isn't that right?) (Worsch 2002). The authors of this paper investigated the frequency of usage of the above-mentioned words collected from the papers by German and Austrian authors (Table 1).

Word	The usage frequency in modern German
und	100%
oder	98%
ich	93%
damals	91%
genug	90%
Mensch	87%
brauchen	85%
Blatt	80%
Heim	77%
Freitag	72%
widmen	70%
Sonne	68%

Word	The usage frequency in modern German
Valuta	65%
Charakter	63%
Appetit	60%
Erde	57%
Jacke	54%
Neffe	50%
Käfig	47%
Zeile	44%
Legende	40%
Teig	39%
Pfahl	35%
Rübe	33%
Ameise	30%

Table 1.
The usage frequency of words

The sources include the following pieces of research: H. Böll. *Die verlorene Ehre der Katharina Blum* (1995), H. Flex *Vierzehn Rosen* (1976), Th. Fontane. *Effi Briest* (1974), G. Grass. *Die Blechtrommel* (1994), P. Härtling. *Eine Frau* (1976), B. Kellermann. *Der Tunnel* (1972), E. Neutsch. *Auf der Suche nach Gatt* (1973), I. Schulze. *Simple Storys* (1999), A. Seghers. *Die toten bleiben jung* (1973), E. Weiskopf. *Abschied vom Frieden*. (1970), A. Zweig. *Der Streit um den Sergeant Grischa* (1976).

Etymology is closely related to lexicology and word formation, and the latter studies the structure and components of the word (Andreyeva and Korneva 2023; Bauer 2020; Komarova 2014; Muminkulovich 2022; Nayak 2021). Linguist V.I. argues that the study of derived words within a particular language, namely identifying their constituent parts, is one of the main tasks of scientific etymological analysis (Durkin 2015). Word formation is an equally important tool in etymological analysis especially when it comes to the origin of compound words. This research confirmed the presence of compound nouns in the German language, with compounding being one of the productive ways of forming new words. A distinctive feature of the newly coined words in the German language is that each word with two or three constituents can be logically translated into another language if the meaning of these components is clear. Thus, German is one of the most logically organized languages among the Germanic ones. Below are some examples (see Table 2).

Word	Literal translation from German	Meaning
<i>Briefträger</i>	“the person delivering letters”	<i>postman</i> (a word of foreign origin)
<i>Eisbahn</i>	“ice track, road, canvas” (a place where you can skate)	<i>skating rink</i> , i.e. a place for skating
<i>Esszimmer</i>	“room for eating”	<i>dining room</i> , in the root of the word “table”, at which you can eat
<i>Halstuch</i>	“neckerchief”	<i>tie</i> (The word is practically scalped from German by replacing h with g. Which led to a completely different meaning and definition of the subject)
<i>Handschuh</i>	“hand shoes”	<i>glove</i> (a borrowed word that is not subject to logical explanation in comparison with the German word)
<i>Schlittschuh</i>	“shoes for skating, sliding”	<i>skate</i> (polysemous: a small horse; part of the gable roof structure; favorite topic, subject of discussion)
<i>Sprechstunde</i>	“hour for conversation”	<i>reception hours</i> (at medical and in other public organizations; for example, receiving any transmitted object; a solemn meeting with the participation of invited persons; call quality, clarity, and intelligibility of the received signal)
<i>Stehlampe</i>	“standing lamp”	<i>floor lamp</i> (a French word)
<i>Taschentuch</i>	“pocket handkerchief” (has a small shape for wiping lips, nose, hands)	<i>handkerchief</i> (a word used in its sole meaning)
<i>Zusammenarbeit</i>	“working together, together”	<i>cooperation</i>
<i>Zweikampf</i>	“fight of two”	<i>duel</i> (the etymology of this word is difficult to explain)

Table 2.

Comparative analysis of a literal translation from a foreign language and the meaning of a word in a translated language

The analysis confirmed that the most common blends of compound nouns in German include the following: two or more nouns; nouns blended with other parts of speech: adjective, numeral, pronoun, preposition. The creation of compound nouns is considered to be a distinctive feature of the German language. Moreover, the portmanteau word may consist of 2-3 or even more nouns. Such words are either neutral in terms of emotionality or have emotionally expressive coloring (Eichinger 2015; Gizi 2018; Wahrig 2006). The level of emotionality depends either on the speech situation or on a particular area of activity (Dothan 2023; Raa 2016).

4. CONCLUSION

The analysis of etymological features confirms that such features as an association, the nature of thinking, emotionality of statements, irony and skepticism, the logic of thinking, metaphoricity and personification, prosopopoeia, and transfer of meanings play an essential role in the occurrence and re-occurrence of the language nominations. All of these aspects contribute to the emotionality of the statements.

The description found in the dictionary entry does not always give a complete, visual representation of a word. Therefore, to understand its meaning, it is necessary to refer to the history of this nomination. The etymology (origin and history) of words contains valuable cultural information. Words of the same origin or the ones borrowed from other languages may be polysemantic, can enter the language as phraseological units, and reflect certain characteristics inherent in the linguistic culture of the studied language.

It is necessary to emphasize the logic, consistency, and accuracy of the German language. Thus, in compound nouns, each of the attached words, as a rule, retains the meaning of its primary nomination when it switches to the secondary nomination of the newly formed word. Consequently, knowing the meaning of all constituents in a compound noun, it is possible to translate any or all of them. Moreover, a high level of proficiency in German allows individuals to accurately identify the semantics meaning of neologisms by assigning the secondary nomination to the word. Using the principles of blending different nouns into one, it is possible to “create” a new lexical unit (in other words, assign the secondary nomination to the word). However, in some cases, this approach can be inappropriate, causing the coining of words in the process of translation. Examples can be the following words:

Kuhblume – relying on the meaning of the components of this compound noun, the translation may be *cow flower*. The correct translation of this word is *dandelion*.

The word *Bärenhaut* seems to be translatable by the two words in the compound and results in *bearskin*. However, when used in a verbal set phrase, the word acquires a new meaning: *auf der Bärenhaut liegen* – to procrastinate.

The literal translation of the two components in the word *Bärenhunger* into Russian will not retain its idiomaticity. The Russian equivalent of *bear hunger* is *wolf's appetite*.

The word *Lebenslauf* is also impossible to translate literally – *the life run* or *the course of life*. When translated into Russian, the word means *autobiography*. A similar example is the word *Laufpass*: when divided into components, only a literal translation could be attributed to the word – a passport for running (running). This meaning is at variance with its semantics since when combined with the verb *geben*, this word means *to dismiss (from the job)* – *Laufpass geben*.

Thus, German compound nouns retain the semantics of the constituents of a newly coined word. As a result, it is possible to logically determine its meaning by dividing the word into components. Consequently, the analysis of vocabulary by its semantics plays an essential role in the research into semantic changes. It becomes especially important in the process of studying the relationship between semantics and the real world. The research findings can serve as a basis for various etymological and word-formation studies. The results can be further developed in the papers addressing the issues of understanding and translating vocabulary in the comparative historical framework.

REFERENCES

- Abaev, V. I., 2007, "On the principles of etymological dictionary", in *Questions of Linguistics. Russian Russian Etymological Dictionary*, Moscow, IRYA RAS, 56–69.
- Andreyeva, Y., I. Korneva, 2023, "The role of the axiological phrase gestalt in cognitive structure of Russian and German phraseological units in the process of intercultural communication", *Cadernos de Tradução*, 43, 1, 1-14. <https://doi.org/10.5007/2175-7968.2023.e87028>
- Anikin, A. E., 2007, *Russian Etymological Dictionary*, Moscow, IRYA RAS.
- Arnold, B., 2022, "A short excursion into etymology" in *Rubies and Implants*. Berlin, Heidelberg: Springer. https://doi.org/10.1007/978-3-662-66116-1_5
- Bauer, L., 2020, "Compounds and minor word-formation types" in *The Handbook of English linguistics*, John Wiley & Sons Ltd., p 463–482.
- Booij, G. E., C. Lehmann, J. Mugdan, S. Skopeteas, W. Kesselheim, 2000, *Morphology: An International Handbook on Inflection and Word Formation*, Volume 2. Walter de Gruyter.
- Buchi, E., 2016, "Etymological dictionaries" in: P. Durkin (ed.), *The Oxford Handbook of Lexicography*, Oxford, Oxford University Press, 338–349.
- Busse, D., 2005, "Etymology and Word History II: Semantic change in a traditional view" in: D.A. Cruse, F. Hundsnurscher, M. Job, P.R. Lutzeler (eds), *Lexikologie. An international handbook on the nature and structure of words and vocabulary. 2. Half band. (Handbücher zur Sprach- und Kommunikationswissenschaft)*, Berlin/New York, de Gruyter, 1306–1324.
- Campbell, L., 2013, *Historical Linguistics: An Introduction*, Edinburgh, Edinburgh University Press.
- Dothan, S., 2023, "Loan words and the perks of knowing etymologies" in *How to Master English as a Multilingual*, Edward Elgar Publishing, 77-78.
- Duden, 2014, *The Origin dictionary. Etymology of the German language*. Volume 7. Mannheim, Leipzig, Vienna, Zurich, Dudenverlag.
- Durkin, P., 2015, "Etymology, word history, and the grouping and division of material in historical dictionaries" in *The Oxford Handbook of the Word*, Oxford, Oxford University Press, 236–252. <https://doi.org/10.1093/oxfordhb/9780199641604.013.025>
- Eichinger, L. M., 2015, *Showing Emotions – Their representation in text and their presence in style*, Tübingen, Stauffenburg.
- Esemuratov, A.E., 2017, "On the question of etymology and etymological analysis", *Academy*, 3, 18, 51–56.
- Etzensperger, J., 2018, "Die Wortstellung der deutschen Gegenwartssprache als Forschungsobjekt. With a critically referencing bibliography" in *Studie Linguistica Germanica*, Berlin/Boston, De Gruyter. <https://doi.org/10.1515/9783110849295>
- Fix, F., 2002, *Origin and history of the word 'German'*. Munich: GRIN Verlag.
- Fleischer, W., I. Barz, 2012, *Word formation of the contemporary German language*, Berlin/Boston, De Gruyter.
- Genaust, H., 2017, *Etymologisches Wörterbuch der botanischen Pflanzennamen*. 6. Auflage, Hamburg, Nikol Verlag.
- Ghanem, M., 2019, *The Power of the Word*, Tredition GmbH Hamburg.
- Gizi, M., 2018, "Word formation in German linguistics: Theoretical and methodological analysis", *Open Journal of Modern Linguistics*, 8, 143–150. <https://doi.org/10.4236/ojml.2018.85015>
- Gsell, O., 2013, "What do historical semantics and etymology have to expect from each other?", in *Historical semantics in Romance languages*, Berlin, De Gruyter, 119–128. <https://doi.org/10.1515/9783110928341.119>
- Hacken, P., 2018, "On the interpretation of etymologies in dictionaries", *Proceedings of the XVIII EURALEX International Congress: Lexicography in Global Contexts*. EURALEX, 763-773.
- Hämmerling, I., 2005, *Historisch-etymologische Analyse des Wortes "Mädel"*, Munich, GRIN Verlag.
- Hentschel, E., 2016, *Word Formation in German*, Tübingen. Narr Francke Attempto Verlag.
- Herbermann, C. P., 1981, "Modern and ancient etymology", *Computational Linguistics*, 95, 1, 22–48.

- Klein, J., 1998, "Linguistic stereotype concepts. Socio-psychological vs. semantic-theoretical strand of tradition and some frame-theoretical considerations", in: M. Heinemann (ed.) *Linguistic and social stereotypes*, Frankfurt am Main, Long, 25–46.
- Kluge, F., 2015, *Etymological Dictionary of the German Language*. De Gruyter.
- Kluge, F., E. Seebold, 2011, *Etymological Dictionary of the German language*, Berlin, De Gruyter.
- Knipf-Komlósi, E., R. V. Rada, C. Bernáth, 2006, *Aspects of German Vocabulary. Selected questions on vocabulary and style*, Bölsész Konzorcium.
- Köbler, G., 2014, *Indo-European Dictionary*, 5th ed. Koebler.
- Koester, R., 2007, *Duden. Sayings: origin and meaning: where they come from, what they mean*, Berlin, Bibliograph. Instit. GmbH.
- Kolyada, N. A., 2004, *Language – The House of Being. In: Prospects of higher education in the non-state education sector: Materials of the scientific and practical conference of universities in the South of Russia. Collection of scientific and methodological articles*. Rostov-on-Don, Rostov Institute of Foreign Languages, 96–105.
- Kolyada, N. A., 2009, *Nation and its language. In: Modern Russia in the context of global changes: problems and solutions. Materials of the XII scientific and practical conference of the Rostov branch of the SGA*, Rostov-on-Don, Publishing House of the Modern Humanitarian University, 126–129.
- Komarova, Z. I., 2014, *Methodology, method, methodology and technology of scientific research in linguistics: textbook. manual*. 3rd ed., ster, Moscow. FLINT.
- Krosch, E., 2004, *Die Entstehung des Wortes "Volk" – Etymologische Untersuchungen eines Kollektivs*, Munich, GRIN Verlag.
- Kuznetsov, S. A., 2006, *A large explanatory dictionary of the Russian language*, St. Petersburg, Norint.
- Lühr, R., 2017, "Semantische Gegensätze", *Jahrbuch für Germanistische Sprachgeschichte*, 8, 1, 147–163. <https://doi.org/10.1515/jbgsg-2017-0011>.
- Makovsky, M. M., 2004, *Etymological dictionary of the German language: a word in the mirror of human culture*, Moscow, Izdat. Azbukovnik Center.
- Matyash, T. P., 1988, *Consciousness as integrity and reflection*, Rostov-on-Don, Rostov University Press.
- Muminkulovich, A. S., 2022, "Linguistic and methodological study of lexical derivations in German languages", *Eurasian Research Bulletin*, 6, 98–102.
- Nayak, S., 2021, "Change of meaning in language: Directions and dimensions", *International Journal of All Research Education & Scientific Methods*, 9, 5, 4200–4205.
- Otkupshchikov, Y. V., 2001, *Essays on etymology*. St. Petersburg, Publishing House of St. Petersburg University.
- Otkupshchikov, Y. V., 2005, *To the origins of the word. Stories about the science of etymology*, St. Petersburg, "Avalon", "ABC-Classics".
- Pan, Q., 2021, "Traductology, linguistics, and culture: the contrastive function of omissions in English-Chinese translations of the intercultural collision in Little Red Riding Hood", *Heritage Science*, 9, 159. <https://doi.org/10.1186/s40494-021-00629-7>
- Pokorny, J., H. B. Partridge, 1969, *Indogermanisches Etymologisches Wörterbuch*. <https://indogermanisch.org/pokorny-etymologisches-woerterbuch/index.htm>. Accessed 9 Dec 2021.
- Raa, N. J., 2016, "Knowledge transfer through noun compositions in the Early Medieval Monastery", in: *Word formation in German*, Tübingen, Narr Francke Attempto Verlag GmbH + Co. K., 89–111.
- Rahmani, S., 2020, *From the way and wrong path of etymology. A lexical determination of kinship, adoption, and commercial correspondence: with a view to coefficients of similarity in German-Persian word pairs*, Heidelberg, Ruprecht-Karls-Universität Heidelberg. <https://doi.org/10.11588/heidok.00029098>
- Rask, R., 1992, *Von der Etymologie aller & eine Einführung in die Sprachvergleichung*, Tübingen Narr.

- Schemann, H., 2011, *German Ideomatics: Dictionary of German idioms in context. 2nd edition, with complete revised introduction*, Berlin/Boston, Walter de Gruyter GmbH & Co. KG.
- Schroeder, A., H. U. Schmid, 2016, "Words, word formation, lexicology and lexicography, etymology", *Zeitschrift für Germanistische Linguistik*, 45, 1, 156–160. <https://doi.org/10.1515/zgl-2017-0007>
- Smirnov, A., 2021, *Consciousness. Logics. Language. Culture. Meaning. Liters*, Moscow, Languages of Slavic culture
- Sternin, I. A., M. Y. Rosenfeld, 2008, *Word and image. Monograph*, Voronezh, "Istoki".
- Timoshilova, T. M., 2005, *The etymological genesis of verba dicendi of modern English: dissertation*, Candidate of philological sciences, Belgorod.
- Tsintsiruk, V., 2022, *On borrowings from German in Polish culinary vocabulary /Fremdwörter englischer. Herkunft im Deutschen*. <https://ruj.uj.edu.pl/xmlui/handle/item/299264>. Accessed 9 Dec 2021.
- Turabaeva, K. E., 2022, "Comparative analysis of the etymology of terms of consanguinity of Russian and English languages", *American Journal of Social and Humanitarian Research*, 3, 4, 116–119.
- Wahrig, G., 2006, *Deutsches Wörterbuch*, Mosaik Verlag.
- Wahrig, G., 2009, *Herkunftswörterbuch. 5. Auflage. Band 6. Wissenmedia*, Gütersloh, München, Wissenmedia.
- Warbot, J. J., 1990, *Etymology. Linguistic encyclopedic dictionary*, Moscow, Soviet Encyclopedia.
- Wettig, J., J. Nouri, K. Reshetnikov, R. Yangarber, 2012, "Information-theoretic methods for analysis and inference in etymology", *Proceedings of the Fifth Workshop on Information-theoretic Methods in Science and Engineering*. Centrum Wiskunde & Informatica, 53–56.
- Willer, S., 2015, *Poetik der Etymologie: Texturen sprachlichen Wissens in der Romantik*, Berlin, Walter de Gruyter GmbH & Co KG.
- Worsch, W., 2002, *Redewendungen. Wörterbuch der deutschen Idiomatik*, Duden.
- Zlobinska-Görtz, M., 2018, *"Die innere Form des Deutschen" von Hans Glinz: Rezeption, Wirkung und sprachtheoretische Zuordnung*, Düsseldorf, Inaugural-Dissertation zur Erlangung des Duden. phil.
- Zulpukarov, K., S. Amiraliev, G. Aipova, A. Zulpukarova, T. Toichuev, A. Joldosheva, S. Apaeva, B. Ryskulova, A. Saparbaeva, M. Abdykulov, Z. Abdullaeva, 2021, "About transformation formulas of the most ancient roots in Eurasian languages", *Open Journal of Modern Linguistics*, 11, 907–918. <https://doi.org/10.4236/ojml.2021.116070>

