

# STRUCTURAL, SEMANTIC, AND COGNITIVE FEATURES OF MEDICAL TERMINOLOGICAL LANGUAGE BASED ON ROOT VERB STEMS

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The article presents the complex analysis of semantic, cognitive, and structural peculiarities of modern English medical terms studied in the direction from derived root verb stems of the Germanic origin towards the derivative stems (S) of terms correlated with them.

The cognitive and onomasiological model of medical term formation suggested in the work includes integrative character and consists of the following stages: motivational, meaning forming, and verbal. At the initial (cognitive) stages, the specificity of the process of term formation is determined by the initial position of the producer, associated with denotations which are the objects of nomination. At the final (verbal) stage, the onomasiological process is related with limits used in the scientific field. These limitations are manifested in the use of a limited range of word-formation models, the lack of connotative elements, and the ambiguity of the semantic interpretation of the medical term.

A significant number of derived root verb stems has acquired terminological meaning as a result of the semantic development of verbs of common spoken language [1; 2]. In other words, people form new words and terms based on real patterns, using commonly used words as prototypes, for example: *Verification of balanced articulation at the trial denture stage is recommended but should be done cautiously as the teeth are set in wax and may be dislodged if the patient is over-vigorous – even in the absence of occlusal interferences. The pulp includes the blood vessels that **feed** the tooth and the nerves of the tooth. On the other hand, water and ethylene oxide **build** ethylene glycol which is also toxic.*

The medical terms under study belong to the various lexical and semantic groups. The greater part of derivative medical terms includes nouns, which proves the tendency to nominalization typical for terminological word building.

A comprehensive study of the implementation of word-forming patterns helps to identify relevant mechanisms in a particular sublanguage, as well as enables a more objective and in-depth disclosure of internal laws of a language. For example, *to break (broke; broken) → break (e.g. skin tear, e.g., with open fracture); out/break (epidemic onset); breaking (fragmentation, rupture), breakage (rupture, rupture formation); breaker (tongs); breakable (brittle, fragile); broken (weakened, impaired); skull-breaker (cranioclast, obstetric bone forceps); un/breakable (non-brittle, non-fragile);*

unbroken (intact); broken/-backed (having a fracture of the spine); broken-bellied (a person suffering from hernia); broken-bodied (a person suffering from hernia); broken-winded (a person suffering from shortness of breath) [3].

The derived root verb stems of the Germanic origin realize their word-building potency (activity, productivity, and valency) in the formation of noun (N), adjective (Adj) and verb (V) stems and demonstrate the low level of word-building activity and productivity in general [4]. The process of derivative stems forming according to definite word-building models consists of one and two derivative steps (/ for the first step of derivation, // for the second step of derivation), or three ones (///for the third step of derivation) rarely: spread (SV) → spread (SN conv.) → gene-//spread (SN compound), spread (SV) → spread/er (SN suf.) → rib-//spreader (SN compound), spread (SV) → spread/ing (SN suf.), spread (SV) → over/spread (SV pref.), spread (SV) → out/spread (SN pref.); burn (SV) → burn (SN conv.), burn (SV) → out/burn (SV pref.), burn (SV) → burn/ing (SN suf.), burn (SV) → sun/burn (SN comp.), burn (SV) → burn/er (SN suf.) → micro//burn/er (SN pref.); ache (SV) → ache (SN conv.) → bone//ache (SN comp.), head//ache (SN comp.), face-//ache (SN comp.), tooth//ache (SN comp.), back//ache (SN comp.), ache//less (SAdj. suf.), head//ache (SN comp.) → haed//ach///y (SAdj. suf.).

In the further term's formation the derived root verbal stems of Germanic origin and related with them derivative stems performing the function of derived stems are combined with Germanic (OE) word-building components (*in-* (OE), *out-* (OE), *over-* (OE), *under-* (OE), *up-* (OE), *-ing* (OE), *-th* (OE), *-er* (OE), *-ful* (OE), *-less* (OE), *-y* (OE) and components taken from other languages (*-able* (L), *-age* (L), *-ant* (L), *-(a)tion* (L), *de-* (L), *en-* (Gk), *non-* (L), *re-* (L), *sub-* (L).) However, derived verb stems of the Germanic origin tend to the combination with genetically relative word-building components.

As a result of the research it has been established that the derived bases of medical terms are represented by all parts of speech, as the medical terminological system provides an opportunity to express various connections and relationships between scientific concepts. However, a significant part of derived stems are noun terms (51%), which we consider as another confirmation of the tendency to nominalization in terminological system.

Thus, the use of complex analysis of derived and derivative stems of medical terms facilitates understanding of the structure and semantics of modern medical terminology. Further research is needed to study the word-formation potential of English medical terminology and feasible methodological strategies for mastering medical terminology [5; 6].

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