

# ASPECTS OF TERM ANTONYMY WITHIN MEDICAL VOCABULARY

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## **Abstract**

Whether it is subject to purely formal description by revealing its enrichment directions – prefixing, suffixing, composition – or it is examined from the perspective of the lexical-semantic relations, of the expressed degree of semantic opposition, **antonymy**, the semantic relationship analyzed in this paper is a well-defined attribute of medical terminology and it implicitly reflects the markers of the conceptual contrariety within the investigated field and, consequently, the general human tendency – including specialists’ – to designate extra linguistic reality by contrast.

**Key words:** *term, medical, antonym, opposition, semantic*

## **Résumé**

Que ce soit soumise à la description purement formelle en révélant ses directions d’enrichissement – préfixation, suffixation, composition – que ce soit examinée sous l’angle des relations lexico sémantiques, du degré d’opposition sémantique exprimée, **l’antonymie**, la relation sémantique analysée dans cette étude est un attribut bien défini de la terminologie médicale et reflète implicitement les repères de la contrariété conceptuelle du domaine étudié et par conséquent la tendance générale humaine – y compris celle des spécialistes – de désigner la réalité extralinguistique par contraste.

**Mots-clés:** *terme, médical, antonyme, opposition, sémantique*

Scientific development and information boom have led to a change in Wüster’s theory where words became terms only if they gathered the qualities of a label, semantic relations, such as synonymy, polysemy or antonymy being unaccepted. Linguists, nowadays, tend to accept the idea that terminological units include many features which may pertain to other units of natural language and other non-linguistic symbolic systems.

Moreover, *specialized communication* is not totally different from *general communication*, and scientific knowledge could be neither uniform nor completely apart from general knowledge.

Terms, as linguistic units of scientific language, may be dynamic, having the capacity to easily coast from one specialty to another, a mobility manifested towards common language as well [Cabré, 2000: 12-15].

In all sciences, any complex structure can be decomposed and represented as binary structures of hierarchy, a fact which outlines the importance of using antonyms in language.

They may be interpreted as “correlative words that are engaged in contrary semantic relations and have been anchored in the consciousness of speakers in the form of couples having a linguistic value and in context they regularly appear in direct opposition with similar combinatorial possibilities” [Șirbu, 1977: 98].

Antonymy is a very common semantic relationship most often encountered both in specialized texts and in the general ones, as well, which frequently registers instances of grading or ranking on a certain scale of value, ordering concepts, in general, and medical ones in particular, as our paper is about to focus on.

Most precisely, in medical terminology these couples of antonyms are formed using antonymic prefixes, the present semantic feature being manifested at the level of *term*. Thus, while classifying medical antonyms, we have taken into account two main criteria: 1. the grammatical means of formation; 2. the lexical-semantic relations [Șerban/Evseev, 1978: 212, 214].

Seen as a precisely conditioned semantic relation, antonymy may very well outline an accurate and exact meaning of the specialized term, by directly opposing two terms (in our case medical ones) regarding their common items.

a. Taking into account the ways antonyms are grammatically formed, we distinguish:

- Pairs of antonyms of different, opposite words, used in medical vocabulary: *organic/mineral*; *concentrate/diluted*; *dilation/ compression*; *motion/rest, pause*; *accelerated/uniform, homogeneous*; *anabolism/ catabolism*, *vasodilation/vasoconstriction*, *constipation/ diarrhoea*, *flexion/extension*, *pronation/ supination* a.s.o.

- Antonyms having the same radical and adding antonymic prefixes in order to establish the opposition between meanings: ***extracellular/ intracellular***, ***extrauterine/intrauterine***, ***hypertension/hypotension***, ***hyperglycemia/hypoglycemia***, ***postnatal/prenatal***, ***submandibular/ supramandibular*** a.s.o.

- Antonyms having the same root to which the opposition is expressed by a single negative, directional, or quantitative prefix present in morphological structure of one of the members of antonymic couple, such as:

**a. prefixes having a negative value:** *a-* vitaminosis/**avitaminosis**; *an-* organic/**anorganic**; **anti-** inflammatory/**antiinflammatory**, corrosive/**anticorrosive**; *contra-* indication/**contra**indication; *de-* contamination/**de**contamination; *des-* assimilation/**dessimilation**, *in-* stability/**in**stability, soluble/**insoluble**; *un-* protected/**un**protected; *non-* infectious/ **non**infectious;

**b. directional prefixes:** *ante-* flexion/**anteflexion**; *extra-* uterine/**extra**uterine, cellular/**extra**cellular; *inter-* ventricular/**inter**ventricular; *intra-* venous/**intra**venous, cutaneous/**intra**cutaneous; *post-* mastectomy/**post**mastectomy; *pre-* diabetes/**pre**diabetes; *retro-* molar/**retro**molar;

**c. quantitative prefixes:** *hemi-* paresis/**hemiparesis**; *hyper-* glycemia/**hyper**glycemia, acidity/**hiper**acidity; *hypo-* thyroidism/**hypo**thyroidism, metabolism/**hypometabolism**; *micro-* trauma/**micro**trauma; *macro-* esthesia/**macro**esthesia; *poly-* articular/**poly**articular; *pluri-* glandular/ **pluri**glandular; *semi-* cartilaginous/**semi**cartilaginous; *sub-* retinal/ **sub**retinal; *super-* secretion/**super**secretion; *supra-* lumbar/**supra**lumbar; *ultra-* virus/**ultra**virus.

The semantic relation of antonymy settles between monosemantic terms. In case of polysemantic terms, if the same antonym corresponds to all meanings, this could be considered an absolute relation: *alive/dead*, *deceased*, *large/small* bowel, *left/right* ventricle, *vena cava superior/inferior*, *external/internal* iliac vein, *anterior/posterior* lobe of cerebellum, etc. Antonyms are crucial in differentiating the precise meanings of polysemantic lexeme.

Semantic structures of antonyms may be different, so each of the terms of a pair of antonyms can enter into relations with other words depending on the context.

The adjective *organic*, for example, may be opposed to *mineral* or *inorganic* (in chemistry) – *organic compound/inorganic or mineral compound*; to *functional* (in medicine) – *organic disorder/functional disorder*, or to *chemical* (agriculture) – *organic fertilizer/chemical fertilizers* [Chiş, 200: 174].

It is clear that only the context can highlight the true meaning of antonyms.

The following series of antonyms of the same class, namely, perfect antonyms, are: *health/disease*, taken from common language; *health/disease*, *morbidity* which can have the mark of scientific style. One can easily notice how a polysemantic term can lead to special stylistic effects.

Opposable terms are binding on linear connections when there is perfect correspondence in terms of their semantic structure.

We can mention the existence of *linear antonymic relations*, when the terms of each pair of antonyms within the two sets of synonyms retain the same semantic components [Sîrbu, 1977: 175].

For example, the double pairs of antonyms *healthy/sick*, are in a relationship of synonymy with *sane/sick*, the last being seen more often in popular language.

The lexeme *healthy* is perfectly opposed to *sick*, both being stylistically neutral, having the same domain of use and not being distinguished by additional semantic elements.

The antonyms *sane/sick* are characterized by an identical expressive feature, both being specific to the familiar style, out of the current language.

b. In terms of lexical-semantic relations, antonyms of medical vocabulary can be grouped into *gradual*, *directional* and *complementary* antonyms [Bucă/Evseev, 1976: 150; Sârbu, 1977: 144-150].

- Gradual antonyms are the extreme poles of a generic concept and may involve the existence of one or more intermediate terms: drum vein *anterior/(inferior)/ posterior*; cardiac vein *large/(middle)/ small*; *undernourishment/ nourishment/over-nourishment*; *constipation stool/ normal stool/diarrhoea*; drugs having an *immediate/rapid/intermediate/ slow* action.

- Directional antonyms express actions oriented in opposed directions: pulse *high/low*; *to aggravate/to ameliorate* the symptoms of the disease; *to open/to close (suture)* the wound; *vasodilatation/ vasoconstriction*; *to excite/to inhibit*;

- Complementary antonyms are opposite notions, denying one of the terms involved and directly affirming the other, the existence of an intermediate neutral term being excluded: *insane/normal* patient; *conscious/unconscious* patient; *positive/negative* RH; *interior/exterior* wall; *penetrable/impenetrable*; *antum/postum* – abortum septicaemia; *infectious/ noninfectious*; *transmissible/un-transmissible*; *indication/contraindication*; *inflammatory/ anti-inflammatory* drugs, etc.

One could notice that *gradual antonyms* are not very well represented in medical language, as opposed to the *complementary* and *non-gradual* ones, which are to be found in a larger amount within the medical discourse, due to the fact that we operate with contradictory notions which do not involve intermediate grades.

The following fragment has been extracted from the field of rheumatology; we can noticed more than one pair of non- gradual antonyms:

“Articulațiile mediotarsiană și subastragaliană permit abducția și adducția întregului picior, cu o amplitudine de 10°-20°. Supinația și pronția piciorului (inversia și eversia) se fac tot din aceste articulații. Eversia, sau pronția piciorului, rezultă din asocierea abducției cu rotația externă, ușurată și de flexia dorsală a piciorului, iar inversia rezultă din asocierea adducției

cu rotația internă, ușurată și de flexia plantară a piciorului” [Sîrbu, 2007: 158]./“Mediotarsal and subastragalian joints allow for the abduction and adduction of the entire foot, with 10°-20° amplitude. The supination and pronation of the foot (inversion and eversion) can also be performed from these joints. The eversion, or pronation of the foot, results from associating abduction with external rotation, being facilitated by dorsal flexion of the foot, and inversion results from associating adduction with internal rotation, facilitated by the plantar flexion of the foot”.

Being extracted from a high specialized medical language in order to express opposed movements, these antonyms do not allow intermediate grades: *abduction* ≠ *adduction*, *supination* ≠ *pronation*, *inversion* ≠ *eversion*, *external rotation* ≠ *internal rotation*, *dorsal flexion* ≠ *plantar flexion*.

### Conclusions

In what ambiguities are concerned, most of the time the context emphasizes the most striking explanations in medical language; these ambiguities may appear in the surface structure and may suggest also the processes by which they can be solved.

As Angela Bidu-Vrăncianu says: “despite the medical terms characteristics of a closed code, univocally manifested, monoreferential, non-ambiguous and decontextualized, the role of the context is, in so many and diverse ways, very important” [2002: 9].

The particularity of the medical language is not restricted to the denotative character of signs and their privileged relationship with the objects of reality.

Medical language is not just a vocabulary that reflects reality, just as its constituent units are not just labels applied to reviewers; language is seen as a whole unit, a hierarchically ordered system, in which the meaning and value of terms result from the relationships that they establish between them.

Antonymy is a semantic relation very commonly used in specialized texts, as well as in general ones; it frequently registers various instances of grading and ranking on a certain scale which obviously helps the structuring of concepts.

Our analysis has demonstrated that antonymy is a well-determined attribute of medical terminology, which highlights through opposition the specific features of a particular concept; moreover, it is extremely important for contextual disambiguation.

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