

DYNAMICS OF MEDICAL LANGUAGE DUE TO POLITICAL AND ECONOMIC CONTEXT

Ana Aşkar

Assist., PhD Student, "Iuliu Haţieganu" University of Medicine and Pharmacy, Cluj-Napoca

Abstract: Along the successive ages of human history, medicine has evolved from traditional and magic practices connected to health and spiritual wellbeing. During the golden age of Greek culture in ancient times, European medicine has become a science with a well-founded terminology based on Greek vocabulary. As political power shifted to Rome, Latin became the second great source of medical terminology. Due to the nature of Greek and Latin languages as well as to the use of Latin in academic and scientific circles long after the fall of the Roman Empire, the ancient medical terminology has been perpetuated along history until the 21st century. However, in the second half of the 20th century, English became an important language for medical science and for science in general, due to the growing political and economic power of the United States of America. The socio-economic development that propelled the United States among the world's most powerful and influential countries has attracted thousands and thousands of highly educated youth and adults from all over the world, generation after generation. The influence of English worked twofold: the economic power caused the development of industry and research. Meanwhile, the students and the physicians who were yearning to earn more money and live a better life had to learn English in order to occupy a place in the American society, adding to its development and prestige. Thus, conferences, books, translations, articles and journals promoted English as the first most important language of communication in the academic environment. All these factors have an important impact on the development of the English medical terminology which has naturally permeated various medical languages.

Keywords: anglicism, globalisation, medicine, power language, terminology.

Power can expand and blow like a cold wind over vast territories, like a huge wave that changes the shape of the earth, and then retire to its initial territories. But the vacuum left by the wave at its returning, might cause the populations once conquered to be attracted to the source of that power.

Following the research and thorough consideration on the theme treated in the present paper, we have reached the understanding that if we are to do justice to the controversial issue of anglicisms and of the English language influence on Romanian language, an interdisciplinary approach is needed or, at least, opening a perspective wider than the strictly linguistic point of view. An objective perception of the linguistic phenomena, keeping in mind the complexity and the interconnectedness of the various factors, as well as the context in which this influence appears, leads to its grasp and proper understanding. In medicine, a correct anamnesis and a minute clinical consultation are essential conditions for a correct diagnosis.

We followed the evolution of medical language under political and economic pressure along the centuries. We also study the growing share of anglicisms that permeate Romanian medical language at this moment.

Our analysis of the growing importance of the English influence on European languages (and others) has started from symptoms to causes. The attention given to the growing number of English elements present in Romanian has triggered our questions. Why is English increasingly powerful? Did other languages have the same trajectory, caused by the same factors? Is this influence bad for other languages?

We studied the evolution of international medical terminology, with a stronger accent on the evolution of English as *lingua franca* in medicine. Then, we gave importance to the evolution of Romanian medical language, the attitude expressed by some linguists and the envisioned solutions in the attempt to limit the multiplication of unnecessary borrowings and imitations.

The ongoing process of globalisation causes some words to be preferred over others or to be "en vogue" (Rusu 2010: 90). At this moment, English is spread far and wide across the globe due to the multitude of the domains of activity and the spaces where it is used. The diversity of the users of English, belonging to different nations, social strata, political and religious backgrounds, as well as the use of it by so many age groups and professions, already make of English a very special language. Being used by so many youth in order to build careers, to get informed, and also to create a certain self image, or to identify themselves with certain groups or a specific status also adds to it.

A special dynamic of medical vocabulary of English origin has been noticed by Valeriu Rusu, in line with the tendency sensed in the scientific terminology in general. In 2000, the researcher was writing in the introduction to the first edition of his medical dictionary, that the dynamics of medical terminology, especially in the fields of biochemistry, molecular biology, cell biology, genetics and immunology had been very powerful (Rusu 2010: 12). The remarks made by the appreciated professor on the difficult and uncertain times we navigate through are proofs of the fact that the transformations and the turmoils that left traces even in the medical language are an effect of the major transformations taking place in the core of sciences, of academic activity and of medical life. Moreover, these transformations are caused by the tumult of the changes and transformations that the entire human society is facing.

Development takes place by periods of accumulation and sudden changes, both in an individual's life and in the life of entire populations. Sometimes, these recurrent phases are sensed as earthquakes, when the balance is lost and society is shaken all the way down to its foundations. These changes may imply the shift of political and economic power. The impact of these changes are felt in all the strata of life and are recorded in different cultural expressions and also by scientists. In our situation, linguists sense the changes and study the consequences at the level of common language and terminology.

The term „barbarism” used by some linguists in connection with English elements and English influences that are found in Romanian language betray the political and cultural implications of this phenomena. The connotations, the interpretation as invasion, as abuse, as danger show the social and psychological sides of a wider influence that is unfolding under the helpless eyes. The irritation and the concern come from the magnitude of the changes and especially from the fact that they are out of our control. In this respect, Mioara Avram, in her work, *Anglicisme în limba română actuală*, defined the concept of

anglicism (Avram 1997: 11) and stated her position, considering the term „barbarism”, used by other fellow reserchers, as inappropriate.

On the other hand, following the Humboldtian tradition, Eugeniu Coseriu describes language as a way towards the intuitive knowledge and understanding of the world. At the same time, he characterises language as a creative activity (*enérgeia*) specific to humans (Coseriu 2001:4). These observations on language cast a different light on its use. Mariana Flaişer adopts Ion Coteanu’s definition of language¹, that describes it as a ” linguistic system, more or less specialised in conveying the content of ideas specific to a professional activity.” Hence, language is not mistaken as mere terminology, but it includes it and is characterised by it, having also various morphological, syntactical and stilistic particularities” (2011: 18-19).

Here interferes the discussion about natural language and constructed language. Aiming to clarify the difference between natural language and scientific language, Flaişer brings into discussion the positions taken by some foreign linguists. On one hand, Greimas (1975) makes the distinction between the natural languages and the ”constructed” languages. According to him, scientific languages mainly designate, they inform. They are entirely constructed. On the other hand, when writing on the modern scientific spirit, also Bachelard states that the special language of science is not natural, but rather ”created as the scientific discoveries are made”.

One major delimitation of the problem discussed in this article is made by P. Lerat, who identifies and qualifies terms as ”vectors of nonlinguistic knowledge” (Bidu-Vrânceanu 2010: 20). This mere affirmation holds political and economic development responsible for the creation, circulation and migration of specialised language and of terms in particular.

Unlike ”Label-Terms”, used to identify concepts, the ”Discourse-Terms” (Bidu-Vrânceanu 2010: 23) are used in specialised communication. The degrees of ”conceptual independence” in their use, in different scientific and activity fields, vary according to the needs (situation, protagonists, aim), from fully decontextualised, to contextualised, in this last instance becoming a common word and ceassing to be a term. How does this happen? Terms are used with different degrees of specialisation. The lower the degree of specialisation, the larger the linguistic circulation that a term can ”enjoy” (Bidu-Vrânceanu 2010: 23). The changes that the meaning of a term can undergo are connected to the contextual and semantic extensions. The consequence of this broadening of a term’s meaning, polisemy, is mere ”determinologization” (Bidu-Vrânceanu 2010: 18, 23).

Due to the limited field they are used in, which is only in specialised languages, terms belonging to different crafts and professions have been named ”professionalisms” by I. Iordan and V. Robu (Iordan Robu 1973: 320). In spite of tehîr belonging to specific fields of activities, terms are used by specialists from different fields and also by non-specialised users. This contributes to the increased circulation of terms across different terminologies and across languages, too.

According to the degree of their specificity, terms can be divided in three categories: a) scientific terms with a high degree of specificity, with restrained circulation, restricted to the use in certain domains; b) scientific terms with a medium degree of specificity, as they are terms common to more than one terminology; c) non-specific

¹*limbaj*, in Romanian

scientific terms, belonging to natural language, „with possibilities of contextual terminologisation by determiners or by resemantization, etc (Flaişer 2011: 23).” (our translation)

From the perspective of external terminology, a term is considered ”a living (linguistic) sign [...] or an active and reactive element which can reveal the intercourse between language and culture, language and society, language and knowledge” (Bidu-Vrânceanu 2010: 23). (our translation)

When ”semantic-contextual extensions take place”, changes of meaning are favored, this process leading to polysemy (Bidu-Vrânceanu 2010: 18). The linguist gives examples as: oxygen, steel, trafic, vitamine, virus, computer.

We have to emphasize here the gap between the large population that uses a certain word (or the specialists using a given term), and the specialists responsible for the normative activity inside every language, who can by no means control the use of language and the entries of new linguistic acquisitions in a host language. The pressure exerted by the large numbers of users and of the communication means available nowadays widen this gap between use and normation. The observer of the linguistic and cultural phenomena is surpassed by the rate of creation of new terms and the speed of their dissemination among the users of scientific terminology, be they specialised or not, all across the globe. This is a normal, natural aspect. Moreover, in the ongoing process of the creation, selection and propagation of terms, also interfere factors as social and cultural background, professional formation, as well as the user’s intention, briefly, the user’s calibre and profile. The great professor D. Dumitraşcu, author of *Medicina între miracol şi dezamăgire*, advances and supports the idea that a physician has to possess a vast culture. This necessary opening to the world and to human nature enables a befitting approach to the medical act itself. An excellent scientist, the physician is a humanist: he/she is a universal human being (Dumitraşcu 1986: 33, 53).

The vast culture potentiates the interdisciplinary character of medical terminology and language. This feature of the cultural and professional profile bares the inprint of the countless intersections of medical language with other terminologies belonging to different and various fields of human activity and endeavor.

Medical and pharmaceutical terminology study the languages of those sciences which deal with the care for the preservation and the restoration of human health (Doicescu 2014: 43). From the very beginning, the span of interest and, implicitly, the span of language opens upon more linguistic fields, pertaining to different sciences, each of them relying on a different terminology.

As Puşcariu states, the Romanians are ”the only Latin people of Orthodox religion, [and] we remained for many centuries with our face turned to the Orient.” (Puşcariu 1976: 370) Hence, the particular, charming configuration of the Romanian language, endowed with unique possibilities of expression within the family of Romance languages. The linguist put that ”unusual form of adaptability to any new form” on the behalf of ”an instant understanding of the foreign construction’s mechanism and of the allusion comprised in the metaphoric expression and, foremost, a true passion for enriching one’s own language with new possibilities of plastic and extraordinary expression” (Puşcariu 1976: 371). The scientist explains the unnecessary loans from other languages showing that „the lexical loans from neighbours do not necessarily mean an absence of the notion

comprised in the word”, „but, rather, only our inclination towards luxury of expressions” (Pușcariu 1976: 371).

Romania's geographic position has contributed tremendously to the history of this extremely beautiful, rich and blessed spot on Earth. From the heavy Slavic influences, present until today mainly in our religious language, to the Arabic, Turkish and Greek words left behind by many generations of foreign rulers, to the much esteemed French influence, Romanian has been "accommodating", with grace and flexibility, such a rich variety of foreign linguistic elements! The difference of perception of the various influences also comes from the political aspect. Thus, when force, violence and loss characterised a contact between Romanians and other populations, the conquerors' or the aggressors' language may be sensed as bitter, as barbarian. However, sweet traces of bitter times are illustrated by Turkish and Arabic words like *baclava*, *bairam*, *cataif*, *halva*. This might be the case due to remote, fading times in history, already forgotten. When, like French, language is a choice or a natural effect of a voluntary, enriching cultural experience, it is perceived as noble, as uplifting, as evolution.

English comes in history and language with a contradictory, twofold reality: on one hand, English is a language spread worldwide by war and invasion. It suffices to mention here India, Australia, Africa, America and Canada. Colonists have plundered and torn into pieces so many populations! On the other hand, English is the language that grew in importance also due to the economic, cultural and social developments that took place after the Second World War. Given the opposite characters of force and choice, the reactions and the attitudes stirred by the growing importance of English as an international language, *lingua franca*, are placed on opposite positions, too. When history is fresh, emotions are strong. This is why the exaggerations in using too many English words in Romanian context, and unwisely picking unnecessary words out of ignorance or lack of translating ability, were qualified as *barbarisms*, term that betrays disapproval and anxiety. But, when a language pervades others as an effect of the unfolding development of different sciences, this is not anymore a matter of choice, but of need. As we develop, new realities need new names. When a new reality is named with an old word, a term is formed by metaphor or by the terminologisation of a common language word used in a specific context, with a new meaning. A very old example of scientific word is *algebra*, from Arabic. The Romanian noun *cifră*, *s(i)fr*, meaning „zero”, comes from Arabic, too.

The imitation of an entire culture may lead to exaggerations, some of them unacceptable, some funny or sad. In *Lexicul românesc de origine franceză*, the authors make an analysis of the ways by which Romanian vocabulary was influenced by French. (*Bârlea, Bârlea 2000* : 22) The unwise, obsessive imitation of French language and culture was named "franțuzomanie"². This is nowadays repeated by the exaggerated imitation of English language and American culture, called "anglomania", and shows that these "manias" are recurrent in human society. According to Bârlea, the process of impregnation of a vocabulary, in our case, Romanian vocabulary, with elements coming from a foreign language, takes place in a favorable context, where linguistic, cultural, social, economic and political elements meet. French, whose influence on our language started in the 17th century and was at its peak in the 19th century, and continues until today to influence our

² Cf. George Ranetti, *Franțuzomania*, București, 1904.

language (2000: 19). The intensity decreased after the 19th century, English taking the first place in the last decades.

A very important and interesting aspect is the affinity of Romanian and English, in spite of their different origins, due to the presence of the Latin element in the English vocabulary. Another reason for the intense imitation of American culture is the dream of power and wealth, idealised under the name of LIBERTY, the greatest illusion created by the so-called civilised countries.

The socio-cultural factor may play an essential role. There are researchers who invoke the "need of instruction", manifested in Romania by a tremendous number of translations from French, now replaced by those from English. As the generations pass, less and less scientists need translations, as the new generations learn English very early and find English texts accessible. In the 19th century many French teachers and artists, diplomats and journalists were brought to Romania to facilitate the fast development and the implementation of French ways in our society. In the last 30 years, English and American teachers have enriched the learning experience of many generations of students, the contact with these cultures being closer than ever. For the times when French culture used to be our model, the increasing number of students that went to France to complete their studies contributed to the absorption of French vocabulary and many other diverse elements of French culture in the fields of "education, army, administration, architecture, urbanism, arts, etc." (Bârlea, Bârlea 2000: 34), as well as the specialists in archeology, gastronomy, technic and medicine, who disseminated French in special languages and terminologies, as well as in the common language (Bârlea, Bârlea 2000: 38).

Especially in the last 3 decades, America has become our model in many regards. That need of instruction, of education, follows the same old pattern, this time, with the American model. When two cultures meet, they will mix like two liquids. The contents and the quantities will dictate the result.

In 1997, with the occasion of the conferences dedicated to the relations between Romanian language and Romanian culture and history, conferences held at the Romanian Academy, speaking about anglicisms and the influences of other languages on Romanian, Mioara Avram was reminding the audience of the important Latin acquisitions present in English via French (1997: 9). English itself was subject of impregnation with French vocabulary. This is a significant aspect, showing the recurrent character of linguistic "invasion".

If we stop for a while to ponder on the nature and power of language, we will soon understand that the world's languages develop and transform under the influences of cultures, of economies and of the world's religions. Both at macro and micro levels of society, language is a mighty instrument which can favour the progress of a population or that of an individual. This is the right moment and time to place under the spotlight the fact that language is a sword with two cutting edges: it can elevate, or it can lead to decay, both at individual and national and international levels. We reach the understanding of language as an instrument of development or, on the contrary, as means of destruction. A sad example is that of Russian language used against the Romanian population in the Moldavian Soviet Socialist Republic between 1940-1991.

Among all the arts, literature uses the most developed and the most complex system of expression, knowledge and archiving of human experience. That is why libraries are the most visited "museums". Like the flow of a river, language is alive, free, unstoppable: it

spreads irrespective of borders, surpassing all obstacles. As communication means develop, language adapts itself to more and more situations, according to the channel and the user's caliber. We return to Coșeriu, who wrote about the creative dimension of the use of a language.

The above questions being clarified, we can understand why an individual or a group of people would protest against, and oppose to the misuse of language. Language means identity, community, survival. Language is common wealth, a place obtained with effort, defended with sacrifice. Maybe it is the essence of a people, its soul and identity, or at least its most complete expression.

Languages spread far and wide, as we mentioned above, with the migration of populations, with the colonization of territories and together with religions. As their empire was growing, the Romans spread Latin far and wide in Europe and the Mediterranean basin.

Spain's colonial history in Latin America has left an important linguistic legacy. Spanish is "mother tongue" in 35 countries and it is the first language learned by 399 million people.

Arabic, too, is a language spread in vast territories. It is spoken by 242 million people in 60 countries. Arabic spread so much together with the Muslim armies as Islam was growing as a new religion and a new political force in the 7th century (Torkington 2014).

Torkington (2014) states that it is the British Empire that has made of English today's global language. We would rather say that as the United States of America were becoming an important political power after the end of the Second World War, English grew in importance as the "Power Language".

Today, there are more than 6,000 spoken languages. In a world in full process of globalization, where populations are more and more interconnected, societies are more and more characterized by multilingualism (Valdés). Therefore, the knowledge of multiple languages is an essential factor in facilitating communication, allowing the world's citizens to participate in the social, cultural, economic and political life.

After the Second World War, the centre of the political, economic and scientific life moved to the United States of America. In modern life, medicine is tightly connected to the research and production from the pharmaceutical field. As research usually needs huge financial resources, science develops more in countries that allocate more money for it. Legitimately, terminology will belong to the language of the researchers. Medical terminology was formed under the same forces. Today, English is the language with the most important impact on medical terminology, due to political and economic reasons, becoming the "*lingua franca*" of medicine, after Greek, Latin and French. (Rusu 2010: 17). In this process, we identify two causes that potentiate each other. Economic power causes English medical terminology to be the most important in the academic and scientific circles, making research possible and fostering the development of scientific publications in English. This development attracts more human resources that will contribute to an even higher development. In this circle of profit, English is the language used in research, in the propagation of the results, as well as the language that permits access to this space. The more powerful North America becomes, the more people are attracted to it. And English is part of this reality.

The linguistic causes of the adoption of English neologisms in Romanian are very important, too. When a term has no correspondent in the target language, the foreign term is adopted. The economy of language is a reason that stands right on the border between linguistic and psycholinguistic causes. English words are shorter than their translations in Romanian. Knowledge is circulated in English more than in any other language. This means that one needs to know English in order to access knowledge and also in order to be “visible” in certain circles. The most important role of a language is to make communication possible. This communication also takes the forms of “media” consumption and propagation of the knowledge attained in different fields of human endeavour.

In conclusion, the factors contributing to the adoption of English elements in our language, Romanian, is manifold. Butiurcă (2008: 46) identifies extralinguistic causes, linguistic causes and psycholinguistic causes.

BIBLIOGRAPHY

ALBU, Rodica. 2003. Anglicisme recente în terminologia medicală românească. p. 143-150. Disponibil la adresa <http://www.diacronia.ro/ro/indexing/details/V2710/pdf>, consultat la 13 august 2018.

ANDRONE, Simona Ionela, 2009, Frazeologie medicală italiană; Frazeologia Medica Italiana; București, Editura Moroșan, 2009.

AVRAM, Mioara. 1997. Anglicismele în limba română actuală. București: Editura Academiei române.

BAHÁ'U'LLÁH.1993. THE KITÁB-I-AQDAS. THE MOST HOLY BOOK. London, Bahá'í Publications Australia and The Bahá'í Publishing Trust.

BAYLON, Christian, MIGNOT, Xavier. 1994. Paris: La Communication, Nathan, Série «Linguistique», p. 327-371.

BÂRLEA, Gheorghe, BÂRLEA, Roxana-Magdalena. 2000, Lexicul românesc de origine franceză, Ediția a doua, revizuită, Editura Bibliotheca, Târgoviște.

BIDU-VRÂNCEANU, Angela, 2007, *Lexicul specializat în mișcare. De la dicționare la texte*, Editura Universității din București, 2007.

BIDU-VRÂNCEANU, Angela (coord.), 2010 - *Terminologie și terminologii*, două volume, București, Editura Universității din București.

BRAD CHISACOF, Lia, 2017, Cel mai timpuriu vocabular român-englez, în *Limba română*, Nr. 3, Anul LXVI, p. 317-322, disponibil la adresa <https://www.lingv.ro/images/LR%203%202017.pdf>, consultat în 2 august 2018.

BUTIURCĂ, Doina. 2008. Limbajul medical. Influența engleză, p. 43-51. Disponibil [online] la adresa URL: http://www.philippide.ro/distorsionari_2008/043-051%20Butiurca%20-%20Limbajul%20medical%20cor.pdf, consultat în 17 iulie 2018.

CABRÉ, Maria Teresa. 1999. Terminology: Theory, methods and applications, John Benjamins Publishing Company Amsterdam/Philadelphia. ISBN 9027298653, 9789027298652[online] consultat în 4 iunie 2018. URL: https://books.google.ro/books?id=HXovykLjp-IC&pg=PP7&hl=ro&source=gb_s_selected_pages&cad=2#v=onepage&q&f=false și <https://books.google.ro/books?id=HXovykLjp-IC&hl=ro>

CHAN, Kai L., *The Power Language Index*, 25 May 2016, disponibil la adresa URL: https://centres.insead.edu/innovation-policy/about/documents/KC_PLIpresentationatINSEAD_25May2016_v2.pdf, consultat în 16 aprilie 2018

COSERIU, Eugenio. 1955/2001. Détermination et entours. În *L'Homme et son langage*. Louvain – Paris – Sterling, Virginia: Editions Peeters.

COȘERIU, E., 2000, *Lecții de lingvistică generală*, Chișinău, Ed. Arc (traducere din limba spaniolă a ediției din 1981).

DOICESCU, Dragoș, Nicolae, 2011, *Tubul digestiv și glandele anexe: elemente de anatomie și terminologie medicală*, Editura BREN, 2011.

DOICESCU, Dragoș, Nicolae, 2014, *Elemente de anatomie, histologie și terminologie medicală*, Editura BREN, 2014.

DRAGOMIRESCU, Adriana, NICOLAE, Alexandru. 2011. *101 greșeli de lexic și de semantică*, București.

DUMITRAȘCU, D 1986, *Medicina între miracol și dezamăgire*, Editura Dacia, Cluj-Napoca.

DIMITRESCU, Florica. 1995. *Dinamica lexicului românesc*. Timișoara, Editura Logos.

FLAIȘER Mariana. 2011. *Introducere în terminologia medicală românească*. Iași, Editura Alfa.

MYERS, Joe. 2016. Does being bilingual really improve your brain? 27 Apr 2016, disponibil la adresa URL: <https://www.weforum.org/agenda/2016/04/does-being-bilingual-really-improve-your-brain/>, consultat în 16 aprilie 2018.

NEWMAN, L. (2015). Cogito Ergo Sum. In L. Nolan (Ed.), *The Cambridge Descartes Lexicon* (pp. 128-135). Cambridge: Cambridge University Press. doi:10.1017/CBO9780511894695.056 (onlyne) consultat în 06.06.2018, URL: https://www.cambridge.org/core/books/cambridge-descartes-lexicon/CEA923D6216011DD8D70CD386DF3DD71/listing?q=cogito+ergo+sum&_csrf=dRAFkREX-d9ox2zCBxKnT1ZjvwsGyldMIsvE&searchWithinIds=CEA923D6216011DD8D70CD386DF3DD71&aggs%5BproductTypes%5D%5Bfilters%5D=BOOK_PART

PUȘCARIU, Sextil. 1976. *Limba română*, vol. I, Privire generală, Editura Minerva, București.

RAD, Ilie. 2007. *Stil și imbay în mass-media din România*, Iași: Editura Polirom.

TORKINGTON, Simon. 2016. Which languages do most people want to learn?, 08 Aug 2016, disponibil la adresa URL:

<https://www.weforum.org/agenda/2016/08/languages-most-people-speak-and-learn>, consultat în 16 aprilie 2018.

VALDÈS, Guadalupe, Multilingualism, in LSA, Linguistic Society of America, available at <https://www.linguisticsociety.org/resource/multilingualism>, consulted on October 29th, 2018.

ZAFIU, Rodica. 2001. *DIVERSITATE STILISTICĂ ÎN ROMÂNĂ ACTUALĂ*. București, Editura Universității din București.

Dictionaries and manuals*

DM 2010 - RUSU, Valeriu, Dicționar medical. Ediția a IV-a revizuită și adăugită, București, Editura Medicală, 2010.

DN 1978 - MARCU, Florin; MANEA, Constantin, 1978, Dicționar de neologisme, ediția a treia.

DN 1986 - MARCU, Florin, 1986, Dicționar de neologisme, București, Editura Albatros.

DOOM2 - Academia Română, Institutul de Lingvistică „Iorgi Iordan-Al. Rosetti”, Dicționar ortografic, ortoepic și morfologic al limbii române, Ediția a II-a revăzută și adăugită, București, Editura Univers Enciclopedic, 2005.

*HARRISON 2014 – LONGO, Dan L., HARRISON. MANUAL DE MEDICINĂ, 18th edition, București, Editura ALL.

LDCE - LONGMAN Dictionary of Contemporary English, 2005, Fourth edition with Writing Assistant, Tenth Impression 2007, U.K., Pearson Education Limited.

MRP - REY, Alain. 1989. Le Micro-Robert Poche. Paris, Dictionnaires Le Robert.

NMWD - The New Merriam-Webster Dictionar , Springfield, Massachusetts, USA, MERRIAM-WEBSTER INC. Publishers, 1989.