CROSS-LINGUISTIC INFLUENCE IN MEDICAL LANGUAGE

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Abstract: *The present paper focuses on cross-linguistic influence in Romanian medical language, due to language contact with English, the modern lingua franca in the technico-scientific field of medicine. In the article, language transfer and cross-linguistic influence will be used interchangeably, as they are the most commonly employed in contemporary second language research. From the different types of influence, our focus of interest is the lexical contact phenomenon, namely the borrowing of anglicisms, as many studies have shown non-native language influence to be common and frequent at the lexical level. We also emphasize some patterns of negative transfer or interference, which is inherently more interesting than positive transfer.*

Key words: *cross-linguistic influence, language contact, interference.*

In second language acquisition, a linguistic subfield with a strong focus on cross-linguistic influence, one characterization of this concept is as follows: "the influence resulting from the similarities and differences between the target language and any other language that has been previously (and perhaps imperfectly) acquired" (ODLIN, 1989: 27). Such a definition suffices to restrict the area under study, but it says little about just what constitutes influence.

The *Longman Dictionary of Language Teaching and Applied Linguistics* (Richards, Schmidt, 2002) upgrades and completes this definition. Characterized as "the effect of one language on the learning of another" (RICHARDS, SCHMIDT, 2002: 294), language transfer is considered to be of two main types: positive transfer, "which makes learning easier, and may occur when both the native language and the target language have the same form" (RICHARDS, SCHMIDT, 2002: 294), and negative transfer, also called interference, defined as the "use of a native-language pattern or rule which leads to an error or inappropriate form in the target language". Most contemporary dictionaries of language and linguistics in different languages (cf. *Routledge Dictionary of Language and Linguistics*, Bussman, 2006; *Dicţionar de ştiinţe ale limbii*, Bidu-Vrânceanu et al., 2005 etc.) yield this classification of transfer into positive and negative. The *Longman Dictionary of Language Teaching and Applied Linguistics* (Richards, Schmidt, 2002) also adds an important remark for the present study: "Although L1 to L2 transfer has been investigated most widely, it is also generally recognized that there can also be transfer from an L2 to one's native language" (RICHARDS, SCHMIDT, 2002: 294).

Language contact results in cross-linguistic influence or language transfer (either positive or negative), which may range from limited lexical borrowing with casual contact and limited bilingualism to heavy structural influence from very intensive contact and bilingualism. The different typologies of bilingualism, determined by the different types of language contacts (permanent or casual, external or internal, direct or indirect, popular or cultural) condition the extent of cross-linguistic influences.

From a historical/diachronical perspective, cross-linguistic influence may be classified into several categories: closed influences, which led to the formation of natural languages, pertaining to the substratum, superstratum or adstratum, influences

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with consequences partially identified in borrowing, and influences in making, manifested by bilingualism and studied at present by sociolinguistics (DOMINTE et al., 2000: 141).

At the simplest level, the lexical level, one language (or idiom) may merely take over linguistic elements from other languages it comes into contact with; this is called lexical borrowing. Even if borrowing affects all the subsystems of the language, it is a highly productive at the lexical level; the words borrowed are loan words in the receiving language. In the narrower sense, in contrast with foreign word, which has not been phonetically, graphemically, or grammatically assimilated into the new language, loan words are borrowed lexemes, which have become lexicalized (assimilated phonetically, graphemically, and grammatically) into the new language. For example: Rom. *cotizaţie* < Fr. *cotisation*, Engl. *picture* < Lat. *pictura*. In the broader sense, the term *loan word* is considered an umbrella term for *foreign words* and *loan words*.

Lexical borrowing is an external means of enriching the vocabulary of a language, as opposed to the internal means, and the lexicon is the one that facilitates all the other types of borrowing: of sounds, semantic loans, and the borrowing of syntactic patterns.

A distinction should be drawn between lexical and semantic borrowings (calques or loan-translations): in lexical borrowings the word and its meaning (usually together with the new object) are taken into the language and used either as a foreign word (non-assimilated loan) like *pizza*, *rafting* in Romanian, and *Sputnik*, *paté*, and *rumba*, in English, or as an assimilated loan word (in the narrower sense). The calque is a French term for a new word modelled after a word in another language. A calque emerges when the language is adapted to new concepts.

But contact can go much further than this, affecting grammar and pronunciation. “For example, the Celtic language Breton, spoken in Brittany, has acquired a French-style uvular /r/, and it has been losing its native phoneme /h/, absent from French” (TRASK, 2005: 101), or the decay of inflections in Old English, brought about, as some scholars cite, by the Viking settlement.

The present article focuses on the effects of cross-linguistic influence of English on Romanian, especially at the lexico-semantic level, in the scientific field of medicine. The phenomena of transfer between the two languages in contact are, in this particular case, the result of a “technical bilingualism” (BIDU-VRÂNCEANU et al., 2005: 87), a casual, secondary linguistic contact between languages, English having been, from the latter half of the 20th century till now, the international language of communication among doctors.

Because English has turned into the main means of international specialized publication, “many non-English-speaking scientists, being aware of the relevance of medical literature in English to their work and wanting to obtain responses to it, find it more effective to publish in English than in their native language” (ALCARAZ ARIZA, NAVARRO, 2006: 753). Therefore, many nations, Romanian academic life included, measure the productivity of their top scientists by the number of times their works are quoted in English-language publications with an impact factor by the Science Citation Index.

On the other hand, English is also the main language of international meetings of specialists and of international scientific exchanges. In fact, the high level of technical and scientific knowledge, the necessity of collaboration among several specialists in order to establish a common base for work, and the complexity of the

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organization of production and of services in today's society are all factors that foster the use of the same technical terms contemporaneously.

"This trend to increasingly use one *lingua franca*, and in relatively few journals for each science, favours a smoother communication between scientists and, consequently, a rapid progress in science" (ALCARAZ ARIZA, NAVARRO, 2006: 753).

The growingly contact between non-English-speaking scientists and the English-speaking scientific world occurs mainly through reading and, to a lesser extent, through writing and attending conferences. It is important to mention that the language contact reaches even national meetings, everyday informal conversations between fellow physicians, and national journals, such as the following Romanian medical journals: *Physiology*, *Romanian Journal of Young Medical Professionals*, *Romanian Journal of Hepatology*.

However, the supremacy of English in the world of science has also a series of pitfalls, of which we mention the fact that the body of medical knowledge published in other languages is not taken into account. "This fact indicates ignorance of the role played by these languages in the different phases of creation, invention, and innovation, and may lead to uniformity of thought" (ALCARAZ ARIZA, NAVARRO, 2006: 753).

As far as the Romanian medical language is concerned, the influence of English has affected all levels of linguistic systems, ranging from lexis and semantics to syntax and pragmatics, with the borrowing of vocabulary items being nevertheless by far the most common. At the terminological level, there are many Anglicisms (*crossover*, *PET-scan pacemaker*, *output*, *insert*, *patch*, *marker*, *stem cell*, *target*, *feedback* etc.), which have entered Romanian medical dictionaries (cf. Rusu, 2007), a proof of their acceptance within Romanian medical communities. There are, certainly, many cases in which language transfer is positive, when the loan-words occur in response to a demand for the expression of a new concept originating in another country, and the word/phrase adopted fits the phonetico-phonological and lexico-semantic Romanian environment. But, on the other hand, negative transfer also affects medical discourse, instance the following different cases of negative transfer: false friends (Engl. *dramatically* → Rom. *dramatic*; Engl. *to induce* → Rom. *a induce*; Engl. *murmur* → Rom. *murmur*; Engl. *insult* → Rom. *insultă* etc.), polysemantic words (*switch*, *cleft*, *marker*, *management*), inadequate grammatical calques (Engl. *in the population* → Rom. *în populaţia*), and English doublets – synonymous variants - for already existing words in Romanian (Engl. *rash* / Rom. *erupţie*; Engl. *pacemaker* / Rom. *stimulator cardiac*).

Interference should be closely surveyed, as any terminological and notional ambiguity or error, affecting the medical oral code, or the written discourse, may have serious consequences in real, extralinguistic life. We open this path of research into negative transfer in the present-day Romanian medical language by two samples of text, taken from up-to-date journals of medicine, which speak volumes. The fragments of text are a proof of the existence of interference in medical language, manifested by a semantic confusion between false friends: Engl. *insult* → Rom. *insultă*. The Romanian term, *insult*, incorrectly used, is introduced in italic and bold letters.

1. "Hipotermia poate reduce dramatic debutul leziunilor. Evidenţe experimentale:
    - Neuro-protecţie prin hipotermie în timpul ***insultei*** hipoxice
    - Hipertiermia (1-2ºC) agravează ***insulta***

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- Hipotermia scurtă (0.5-3h) după ***insultă*** - efect inconstant" (***, 2000, 102: I-343)

2. "Ca urmare a accelerării utilizării de glucoză, creşte nivelul de transportor proteic al glucozei din sânge şi la nivelul membranei neuronale la aproximativ 4 h după ***insultă*** […] Vulnerabilitatea particulară a mitocondriei în timpul şi după ***insultă*** este argumentată de datele biologice şi morfologice (agresiune)" (Bobe, Russescu, 2005)

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