TERMINOLOGY, THE ROLE OF DOMAIN AND INTERDISCIPLINARITY

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Abstract

Terminology *deals with the specialized communication, which is achieved in a certain scientific, technical and professional domain.* *Interdisciplinarity* *is considered another orientation specific to modern sciences, in which the terms of a specific science, could be found in another science or in many sciences. It becomes relevant when a specialist in a specific field of study, knows a few characteristics of the concepts he needs, in order to have a professional interaction with the users of the concepts. The role of the* ***domain*** *is highly important, if it is registered in dictionaries, we could establish the interdisciplinarity of various scientific domains.*

Keywords: terminology, interdisciplinarity, term, concept, semantics, interaction, domain

Terminology

The development of terminology is the direct effect of the science's and technique's evolving and the increasing need of communication between the communities of specialists that have different native languages (Cabré 1998:67-68). Therefore, terminology deals with the specialized communication, achieved in a scientific, technical, professional domain (Bidu-Vrănceanu 2007: 19).

It is accepted, generally, that ''terminologies are definitional systems, in which it is established an interdependence among concept, term, definition and domain, through which it is noticed the terms' preference for monosemy and monoreferentiality''.
Therefore, the specialist's terminology is called **''internal'' terminology**(**T1**), which is normative and it is strictly interpreted according to the aspects of the specialized communication and **''external''** (**T2**) **terminology**, which is descriptive and it has become interesting to the non specialists (id. 2007: 19).

The purpose of this terminology is to ensure a clear, unambigous communication in a certain field of activity (Cabré 2000:36). The functions of **T1** are the following: to represent the knowledge, to establish the name of new concepts and transmit the knowledge. **Internal terminology** is systematic and **cognitive** (Lerat 1995:61), achieving the normative goals by making terminological data bases (lately there has been a great focus on the linguistics of corpora, the analysis of the text-based corpora with statistic

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data). The standardization is strictly conditioned by the affiliation to a *domain* (Bidu-Vrănceanu 2007:45) and it gets a *convenţional form* which ensures the non-ambiguity. For example, **water** (fr. **eau**) is defined in **Chemistry** by the combination H_2O, whereas in **Physics** by the boiling and freezing temperatures (id.).

The external terminology (**T2**) has the goal to identify and use the specialized meaning properly, by describing the terms in use (texts and contexts). One aspect of great interest concerns both the **sender** (more or less specialized) and the **receiver**. Another major aspect is achieved by the **communication channel** (mass media, texts with a medium or inferior degree of specialization) and the **usage conditions** (less restrictive than those from the specialized languages).

The aim of every terminology is, in a way or another, **the term**. Concerning the **external terminology**, the research is based on the relation between **term** and **word**. Another goal specific to the **external terminology** is *to register, explain and describe the specialized terms* from various domains, also taking into account their relation to the common language (Bidu-Vrănceanu 2007:52). Within **T2**, there are more chances to meet a sort of liberty by forming, composing the terms in relation to the common language. Nevertheless, there are established combining limits according to the general dictionaries, that should mention both the specialized meaning and its dynamics. The semantic standardization of the terms in T2 has consequences upon the efficiency of the linguistic communication, which is more or less specialized.

What is interdisciplinarity?

Interdisciplinaritaty has been the aim of many researches lately, being considered another orientation specific to modern sciences, with consequences upon the methods of terminological investigation (Bidu-Vrănceanu 2007:181). Generally speaking, it represents ,, the occurence of a specialized term in at least two or more than two scientific domains."(id). Most of the times, in the studies regarding *interdisciplinarity*, there are often used aspects related with other terminological problems. Thus, we reach the conclusin that the studies dedicated explicitly to *interdisciplinarity* are sporadic. Futhermore, we present a few definitions, given to interdisciplinarity and some aspects and classifications, taking into consideration some authors' point of view:
   - for semantics and terminology, ''*interdisciplinarity* begins when the specialist in a certain domain knows some characteristics of the concepts, he is in great need of, in his professional interaction with the priviliged user of these concepts." (Toma 2006:218).
   - M.T.Cabré (1998:61-111) considers *interdisciplinarity* a characteristic specific to terminology and she makes reference to the sciences with whom it interconditions. Interdisciplinarity has become a characteristic, occuring in nowadays' studies, its main goal being to establish relations, connections among sciences both at scientific, academic level and professional, too.
   - Klein.J.Thompson (1990: 55) thinks that *interdisciplinarity* could be defined by: examples, motivation (in order to explain why it appears), principles of interaction (in order to demonstrate how the subjects of study interact) and a terminological hierarchy.
   - Toma (2006:217) introduces the first classification of *interdisciplinarity*: *internal interdisciplinaritaty* and *external interdisciplinaritaty*, which is based on complex,

epistemic and linguistic criteria, aiming at both the contacts among various fields of study in the interior of the same domain and the effect produced by the migration of concepts. Also, the author explains the terms *supradisciplinarity*, *pluridisciplinarity*, but she stresses the fact that there are not unitary criteria for these types of interdisciplinarity.

  - According to Bidu-Vrănceanu (2007: 183), sometimes *interdisciplinarity* is limited to the interaction among *scientific independent domains* and it does not deal with the relations among the *subdomains* of the same subject of study. For example, pragmatics is a linguistic field, but it is not considered intedisciplinary, although it operates with elements from different fields (id). Other disciplines, that appeared in the last decades are based on the deliberate and fruitful collaboration among specialists, such as e-commerce.

The identification of the interdisciplinary terms can be made according to some criteria such as:
- **the quantitative criterion** which mirrors the terms belonging to two or more scientific domains. This criteron deals with the achivement of corpora, starting from the indications from the general dictionaries, encyclopedic dictionaries, that should give data about the specialized meanings, about the domain they are affiliated to; the indications are given by the *diastratic mark* or results given by *definitions*.
- the semantic criterion
In order to establish the **interdisciplinary aspects,** the terms should maintain the *identity* and the *meaning equivalence*, passing from one terminology to another. The semantic proximity, which is justified extralinguistically, represents a characteristic of the real interdisciplinarity. The author draws the attention upon the difference, that should be made between the simple borrowings, from one domain to another, based on *random analogies*, named *interferences* and *proper or real interdisciplinaries*, which are characterized by *identity* and *semantic equivalence*, among the usages of a term in different terminologies (Bidu-Vrănceanu 2007:185). By *identity* and *semantic equivalence* we understand the same meaning or the same semantic average to whom there are added specific sems. On the other hand, one can identify even great differences between a term used in different terminologies, when metaphorical transfers occur. In this case, we can speak about *interferences*, because these represent the small number of terms registered in at least two terminologies, which is motivated only in some situations and associated with changes of meaning (metaphorical transfers).
- the contextual criterion contributes both to the inclusion of the terms in a specialized domain and the *disambiguisation* of the specialized meanings. It is necessary to identify rigurously the *specialized meaning* of the terms used in more domains. According to this criterion, the syntagmatic criterion is accepted, even if this breaks the principles of the terms'contextualisation. Therefore, ''the *syntagmatic dependence* is considered a method through which it is achieved the necessary semantic accuracy and the syntagmatic investigation that deal with the *immediate contexts,* which contain the *interdisciplinary terms* and establishes the variable situations from contextual preferences till relatively fixed contexts or even fixed ones.'' (Bidu-Vrănceanu 2007: 185, 195, 196).

The role of Domain

This paragraph deals with the **role of the domain***,* as a bench-mark for interdisciplinarity. The **domain** represents, both the cause and the efect of some complex aspects, which can

be analyzed at various levels, among which the linguistic level prevails (Bidu-Vrănceanu 2007: 106).

The **domain** can be identified through the type of knowledge, which limits pure sciences of social or natural sciences and it materializes itself through the adequate terminology (informatics, linguistics, law, medicine, etc). At the same time, a domain belongs to a human, social, economic, industrial activity and it is mirrored in a type of discourse, conditioned socially and professionally (id). Furthermore, the study of the domain in a limited meaning is tightly connected with the delimitation of knowledge in a broad meaning. In order to take into account the importance of domains and subdomains to define terms, we should use the next method of investigation: *diastratic marks* as the domain indicator. ''*The diastratic marks* are pieces of information written between parantheses, before the lexicographic definition and they represent valuable and explicit judgements of the lexicograph, according to the standards and the sociocultural conditions of using some words and meanings." (ibidem 1999: 19).

From the applicative perspective, concerning the specialized vocabulary, the diastratic marks help us to decode the definition and indicates the extralinguistic and linguistic conditions for a correct communication. The domain marks offer ojective information, which is effective for the interpretation of the specialized meaning (regarding the paradigmatic aspects) and the adequate communication (regarding the syntagmatic aspects).

The total absence of the *diastratic mark*, the *domain mark*, represents one of the problems many researches are facing nowadays when they use the dictionaries.

Sometimes the diastratic mark is mentioned, but it not used unitarily and it is not correlated with the adequate trees of the domains. The relation domain-subdomain can be arbitrary, according to the scientific development, with the appearance of new domains, which derive from other domains or they are the result of **interdisciplinarity**. The subdomain can be considered a *small domain*, subordinated to a *large domain*. The difference between them is quantitative (Toma 2006: 220).

In the Romanian dictionaries DEX and DEXI one can sometimes see the diastratic mark (*inform.)* which belongs to the *domain of computer science*, followed by the definition of the term. We present some examples:

In DEXI the term BANNER has the *diastratic mark* (*inform.*) and the following definition ''advertising shim on an internet page, which generally consists of an image or animation with a link to the site of the product which is advertised."

In DEX : BANNER has the *diastratic mark* (pub., indicating the *advertising domain* and the following definition ''long strip of linen on which it is written a message, an advertisments, etc."

The term SITE is registered without the *diastratic mark* in DEX, but it has the diastratic mark (*inform*.) in DEXI.

Another terms such as HYPERLINK, METATAG have equivalents in Romanian and have the diastratic mark (*inform.*) in both dictionaries, but the modern term E-COMMERCE is registered only in DEX without the diastratic mark.

We analyze a few interdisciplinary terms, firstly by checking whether they have the *diastratic mark* in both Romanian general dictionaries:

ACCESS
In DEX, it has the *diastratic mark* that indicates the **domain of medicine and cybernetics**, with the following definitions:
(*Med.*) Symptoms that appear suddenly and determines the ingravescence of an illness.
(*Cib.*) The feature of the memory systems to allow registration and find information.
In DEXI, it has the *diastratic mark* indicating **medicine** and **informatics**, with the following definitions:
(*med.*) ensemble of body's clinical rabblements which appear suddenly and unforeseeable.
 (*inform.*) method of search, read and register some data on the computer's memory.

ACQUISITION has the *diastratic mark* **psychology and informatics** only in DEXI, with the following definitions:
(*psih.*) The process of evolving new behaviours by a person.
(*inform.*) reading and memorizing data by the computer.

ADMISSION has the *diastratic mark* (*tehn.*) and (*inform.*) only in DEXI.

DISPLAY
In DEX, it has the diastratic mark (*inform.*) and (*tehn.*), with the following definitions:
(*inform.*) way of displaying data and results provided by the computer.
(*tehn.*) emphasizing data and results.
In DEXI, it has the *diastratic mar*k *(inform.)* and *(electron.),* with the following definitions:
(*inform.*) the display of existing data and the obtained results on the computer's screen.
(*electron.*) optical display.

We reached the conclusion that the *diastratic mark* is mentioned in less cases, concerning the specialised terms and it is not registered unitarily in the Romanian general dictionaries. The ordinary users are confused and do not understand terms belonging to informatics or other domains if the diastratic mark is missing and they do not have access to a proper definition of the terms they are interested in. The Romanian general dictionaries should be updated, because nowadays technology is at a very fast pace.

Bibliography

1. Angela Bidu-Vrănceanu**,** 2010, *Terminologie şi Terminologii*, Editura Universităţii din Bucureşti.
2. Angela Bidu-Vrănceanu , 2007, *Lexicul specializat în mişcare de la dictionare la texte*, Editura Universităţii din Bucureşti.

3. Alice Toma, 2006, *Lingvistică şi matematică. De la terminologia lexicală la terminologia discursivă,* Editura Universităţii din Bucureşti.

5. Klein J. Thompson, 1990, *Interdisciplinarity. History. Theory and Practice*, Detroit, Wayne State Uiversity Press.

6. M.T. Cabré, 1999, *T*erminology*: Theory*, *methods*, *and applications*, Amsterdam/Philadelphia: John. Benjamins Publishing Company.

DICŢIONARE GENERALE

DEX – Dicţionar explicativ al limbii române, ed. a 2-a, coord. Ion Coteanu,
       Luiza şi Mircea Seche, Ed. Univers Enciclopedic, Bucureşti, 1998.

DEXI – Dicţionar explicativ ilustrat al limbii române, coord. Eugenia Dima, Ed.
        ARC& GUNIVAS, 2007.