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# The communicative situation as frontier between words and constituents of terminological variants

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## Abstract

The article describes the importance of the analysis of language in use. In this respect, it has been appreciated that many of the sweeping differences between lexicography and terminology are seen as conflicting ideas in contrast with the descriptive theories of terminology. In this study, it is believed that the limits between these disciplines become blurred when we take into account pragmatic and discursive criteria. On the basis of a corpus composed of popularized scientific articles, attention will be paid to the identification, with more or less difficulty, of terminological variants in a certain communicative situation.

The purpose of our study is to support the status of terms whenever they are used in a specialized communicative situation, considering that the participants can have different degrees of knowledge. In addition, it will be shown that the terminology of a particular subject field is never completely fixed due to the range of discourses where it can appear; as a consequence, it is proposed to use genre restrictions when including variants of an original term in a dictionary.

## 1. What makes terminology and lexicography different?

The limits between lexicography and terminology are often impossible to be set unless we take into account essential external aspects: the communicative situation and the textual genres where it is encoded.

On the basis of a corpus composed of popularized scientific articles from the field of stem cells, we will analyze lexical units which are clearly terms and others which are in the frontier word-term. In the last case, only the communicative situation and the discourse where the unit appears can help us to make decisions.

The purpose of our study is to break the frontiers between lexicography and terminology, supporting the status of terms even if they are used by semi-experts or non-experts in a less specific communicative situation but still specialized. Besides, we also consider relevant to show that terminology is not a fixed set of terms of a particular subject field as terms cannot be studied by themselves but rather in context.

## 2. Towards understanding the importance of the communicative situation

The differences between the disciplines lexicography/terminology have been polemic and discussed by experienced scholars (Riggs, 1989, Rey, 1995, Bergenholtz and Kaufmann, 1997). From our point of view, some of them seem to follow the Wusterian mode, whose objectives do not have to do with the current descriptive attitude that terminology has adopted. Five arguments have been selected in this respect:

- a) Terminology is primarily prescriptive whereas lexicography is primarily descriptive (Riggs, 1989: 89, Rey 1995: 120)
- b) The term is more independent of context than ordinary words (Lerat, 1995: 45)

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- c) Terminology takes an onomasiological approach while lexicography takes a semasiological approach (Riggs, 1989: 107)
  - d) Terminology prepares dictionaries for experts, lexicography for laypeople (Bergenholtz and Tarp, 1995: 10)
  - e) Terminology prepares dictionaries to encode texts (text production) and lexicography to decode texts (text reception) (Riggs, 1989:90, Pavel, 2008: 2.1.2)

All these arguments, aimed to differentiate lexicography and terminology, are, in our opinion, contrary to the essential fact of considering the communicative situation in the study of terminology. Arguments a) and b) sustain the prescriptive approach followed by traditional terminologists, which did not let us understand specialized texts beyond allowing us to identify standardized terms. This approach did not take into account language in use. Sager is one of the first terminologists that confirms a different way of thinking from the prescriptivist General Theory of Terminology founded by Wuster:

‘In terminology, there are two camps: the modern terminologists and the traditional terminologists where there is a major division between those who believe context to be relevant for the identification of usage and those who believe terms to be context independent’. (Sager, 1990: 8)

In accordance with Sager, we believe in a functional approach to language and, therefore, to terminology. We consider that the only way of studying terminology is through discourse as it shows the actual usage of lexical units in different communicative situations. Discourse serves as a decoding mechanism that leads us to move away from the prescriptive study of terminology and to consider a descriptive one.

Argument c) supports Wuster’s objective of naming concepts and the establishment of conceptual hierarchies. On the contrary, we believe in a semasiological approach; we study form before meaning. Corpora are nowadays our point of departure for the detection of terminological units.

Argument d) puts forward the criterion of standardization of terms as terminology standardization involved only experts in the acceptance of a term and its meaning within the domain. Following Socioterminology, which recognizes a broader distribution of knowledge and observes different interactions levels, we believe in the development of the scientific language in every type of communicative situations where users do not have to be necessarily experts in the field. Specialized communication can happen between users having the same or different level of knowledge.

Argument e) emphasizes the idea of the traditional terminologists on encoding texts from the standardized terms. However we consider that the decoding of the text is also needed in terminology before the encoding. Due to the diversity of languages, there is ‘a necessary terminological instability’ (Gaudin, 1990: 637). This idea is also supported by Cabré (2000: 50) who states that every process of communication implies lexical variation; that is, alternative denominations for the same concept. However, the author states that every terminological unit undergoes this principle of variation in a different way because they depend on the communicative situation:

‘The greatest degree of variation occurs in discourse destined to popularise science and technology; the smallest degree of variation is characteristic of terminology standardised by groups of experts; a middle position is characteristic of the terminology used among specialists in everyday communication’. (Cabré, 2000: 50)

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The resulting variants of the original terms are lexical units which activate their status as terms when being used in a certain communicative situation. Ciapuscio (2003: 22) considers the close relation between the terminological unit and the text because it is from texts that we can observe terms and the functional, situational and thematic aspects where they are placed.

### 3. Methodology

This paper is related to a broader terminological variation project on the domain of stem cells. This particular study is limited to samples of variants of terms considered in the project. The specialized corpus used for our purpose has got 500.000 words and it is composed of 481 popularized scientific articles extracted from newspapers, popularized magazines, and health institutions.

The concordance programme used has been *WordSmith Tools 5.0* which has allowed us to see the different terminological variants for the same concept. As a starting point, we have selected terminologised units for a certain concept. Terminologised units have been selected from their inclusion in three specialized glossaries (published in the sites of the International Society for Stem Cell Research and the Harvard Stem Cell Institute, and the journal *Nature*). The less terminologised units or variants have been identified in concordances through discursive markers placed around the genuine terminological units. All the lexical units, terminologised or less terminologised, considered in this study are noun phrases as units of nominal type are the most frequent in a specialized corpus (Daille et al., 1996: 207).

Daille et al. (1996: 201) defines a variant of a term as ‘an utterance which is semantically and conceptually related to an original term’. In this definition, several aspects have been considered as relevant; firstly, *utterance* refers to a linguistic form extracted from a text; secondly, *original term* regards to an original term included in some glossary or thesaurus; and finally, according to the semantic and conceptual relation, the author seems to mean that there is a conceptual equivalence between the original term and the variant. This study focuses on variants which are polilexematic due to the popularized register; the majority of the variants are explanatory.

The identification of polilexematic terminological variants usually involves an effort. In our opinion, this effort is low in the case of variants where only a constituent is replaced; for example, an inexperienced terminologist could recognize *blood stem cell* as a variant for the term *hematopoietic stem cell*, where there is a substitution of the Greek constituent by an English term with same meaning.

However, variants of a polilexematic kind are particularly difficult to identify when one constituent has general-language meaning (Meyer and Mackintosh, 1996: 3). For example, for the term *stem cell* there have been found variants such as *mother cell*, *dividing cell* or *primitive cell* which could be overlooked in a text. While *cell* is easily recognized as a scientific term, it is not evident from the compounds that they refer to the concept of the term *stem cell*. However each of the pre-modifier constituents refers to some characteristic of what a *stem cell* is: a cell that divides to produce daughter cells (*mother*), a cell that can renew itself through cell division (*dividing*), a cell that is undeveloped yet, therefore it can develop into different cell types (*primitive*); therefore, the pre-modifiers contribute to the naming of the same concept. Another example is the variant *adult stem cell* for the term *somatic stem cell*. *Somatic* refers to cells in the body (not germ cells, sperm or eggs), so that the pre-modifier *adult* refers to the essence of this kind of stem cell making the UT more comprehensible for a

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non-expert. In order to identify and understand polilexematic lexical units as terminological variants, we need to understand the special sense which joined constituents get in the communicative situation. Popularized discourse seems to contribute to the terminological transparency of variants.

The issue becomes even more difficult when more than one constituent has a general-language meaning. For example, we have found variants such as *veritable fountain of youth* for the term *stem cell* or *building blocks of life* for *embryonic stem cell*. These metaphors derive from our general knowledge and present an analogy between an unfamiliar concept and a familiar one. In these examples architectural objects are presented in an allegorical way as its meaning is deeper than in usual metaphors. Both metaphors express some characteristic of the concept however they just provide a very general understanding. To be able to capture their meaning and of course, to be able to use them, the communicative situation and the discourse where they appear should be taken into account more than ever.

We think that polilexematic variants are not less important in specialized communication than standardized terms as users with different levels of knowledge might need or want to read a specialized text. We agree with Sager on his appropriateness criterion ‘a purely pragmatic criterion entirely dependent on social norm’ (1980: 316) as it is applicable to the variants we have found in the popularized scientific articles. We think that it is the communicative situation represented in a corpus which leads to the appropriateness of variants.

#### 4. Conclusion

Lexicography and terminology are based on similar theoretical foundations. The different criteria are based on pragmatics, which leads to the study of language from a descriptive approach. Therefore, in order to recognize a word or a group of words as a term we need to pay attention to the communicative situations and the discourse where the word appears in order to be able to decide “whether language is behaving terminologically or normally” (Pearson, 1998: 26).

Previous work has demonstrated terminological variation across genres, but how much have been used for compiling dictionaries? Our suggestion for a terminological work of this kind is to build up a corpus with texts that belong to just one text genre because we consider that textual genres are strictly correlated with variations. This way, the variants extracted from texts will belong to a specific communicative situation. Thus, we propose to include variants for each entry (original term) in a specialized dictionary, specifying the genre where each denomination has proved to be used.

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