



Sources of Terminological Variation in English and Bulgarian

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Abstract

The paper discusses some sources of terminological variation in English and Bulgarian. The corpus of examples is excerpted from English and Bulgarian scientific texts on the Technology of Milk and Dairy Products and the Technology of Grain and Baked Products. The paper mentions some problems related to term formation emphasizing that they actually arise in general language.

Practical applications

The practical applications of the study of terminological variation have to do with the teaching of English for Specific Purposes courses as well as with terminography, which is concerned with the compilation and editing of terminological dictionaries, and specialized translation studies, which focus on the unambiguous rendering of terminology from one language into another.

Key words: terminological variation, terminological doublet, abbreviation, clipping, eponymous term, borrowing



Introduction

Terminological variation, i.e. the presence of two or more terms denoting the same concept belonging to a given terminological field, violates the requirements which terminology is supposed to observe although those requirements are based on an idealized understanding as to what the linguistic form and meaning of terms should be. According to Sager, terms must be semantically precise, unambiguous and short, not permitting the existence of synonyms, homonyms or morphological variants (in Popova 2012: 60). The recommendations concerning terminology are various since they touch upon different aspects of terminology formation, e.g.: selection and description of the concept, determination of the relationship between the meaning and the linguistic form of the term and adoption of the most appropriate linguistic expression which will represent the concept (ibid.).

The terms designating the same concept in the same terminological field are called terminological doublets and are considered to be a serious flaw to the terminological system (Kvitko 1976: 59-60). As L. Manolova points out, linguists sometimes prefer the term *synonym* to *terminological doublet* although the former is more imprecise because, unlike general language, terminology denoting the same object or phenomenon does not express stylistic nuances (Manolova 1984: 27). That is why, instead of using the terms *synonyms* or *terminological doublets*, we may opt for *terminological variants*, as is done in the present article, as a more general term.

Materials and Methods

The aim of the present study is to delineate the major sources of terminological variation in English and Bulgarian on the basis of terminology excerpted from scientific texts in these languages. The texts we have selected concern the Technology of Milk and Dairy Products and the Technology of Grain and Baked Products. We have also excerpted examples of terminological variants from an English-Bulgarian dictionary of acronyms and abbreviations.

Sources of Terminological Variation in English

One of the major sources of terminological variation in English is linguistic shortening producing abbreviations and acronyms. In scientific communication, shortening provides a maximum information load of the term with minimum

linguistic means. Some typical examples of shortening to produce terminological variants in English are the following: *Aerobic Plate Count* (counting the aerobic bacteria on a petri dish) > *APC*, *colony-forming unit* (Bulg. колонообразуваща единица) > *CFU*, *continuously stirred-tank reactor* (Bulg. реактор тип „идеален смесител“) > *CSTR*, etc., where all major words in the phrase are replaced by an initial in the shortened form. Usually, functional words such as prepositions are not represented in the shortened term, e.g.: *fat-in-dry matter* (Bulg. мазнини в сухо вещество) > *FDM*, although there are some exceptions, e.g.: *cleaning-in-place separator* (Bulg. сепаратор от самоочистващ тип) > *CIP separator*, *cleaning-out-of-place separator* (Bulg. сепаратор от несамоочистващ тип) > *COP separator*.

Linguistic shortening is not to be preferred in highly specialized communication if the abbreviation/ acronym corresponds to more than one concept in the same terminological field, i.e. if it is polysemous. In military terminology, for instance, the acronym *MIDAS* can be interpreted as follows: *missile intercept data acquisition system* (Bulg. система за събиране на данни за прихващане на ракети или снаряди), *missile detection alarm system* (Bulg. алармена система за откриване на ракети или ракетни снаряди), *missile defense alert satellite* (Bulg. спътник за алармиране на противоракетната отбрана), *military defense alarm system* (Bulg. алармена система на военната отбрана) (EBDA 1992).

The short linguistic form of the term is sometimes attributable to clipping rather than abbreviation or acronymy, as a result of which the new term becomes a clipped compound or a mixed formation in the grey area between an abbreviation and a clipped compound, e.g.: *capital expenditure* (Bulg. капиталови разходи) > *capex*, *oxidation-reduction potential* (Bulg. окислително-редукционен потенциал) > *redox potential*. Clipping is sometimes an intermediate stage preceding abbreviation, e.g.: *converging-diverging nozzle* (Bulg. сопло на Лавал) is clipped to *con-di nozzle* and abbreviated as *CD nozzle*. Although clipping is usually due to apocope, i.e. the loss of the final syllables of the word, some terminological variants are produced by means of syncope, that is loss of sounds in the middle of the word, e.g.: *isoenzyme* > *isozyme* (Bulg. изоензим, изозим), or aphaeresis preserving the end of the word, *bacteriophage* > *phage* (Bulg. бактериофаг, фаг).



Another major source of terminological variation in English is the presence of an eponymous term for the same concept, a term formed on the basis of a personal name, e.g.: *Koestler ratio/ number* and *chloride/lactose ratio* (Bulg. хлорзахарно число, число на Кьостлер). As we have shown elsewhere (Choroleeva 2014), the attitude to eponymous terms is quite variable, especially as regards medicine since sometimes the same concept is represented by several eponymous terms preferred in different countries, which depends on the origin of the scientist the term is named after, e.g. the terms *Bekhterev disease/ Bekhterew's disease* and *Marie–Strümpell disease* both stand for ankylosing spondylitis, a type of arthritis. The existence of two or more eponymous terms to denote the same concept may hamper specialized communication or the comprehension of a scientific text.

Terminological variation may also be the product of the simultaneous existence of a term in the form of a phrase and one in the form of a simple or complex word, e.g.: *caseolytic microorganism* > *caseolyte* (Bulg. казеолит), *fluid-bed dryer* > *fluidiser* (Bulg. флуидизатор), etc. In this case, one of the terms consists of a single terminological element, whereas the other one possesses more than one terminological element. L. Manolova believes that the full and the short form of the term cannot be considered to be equally appropriate „since this violates the requirement that terms are to be monosemous“ (Manolova 1984: 26; translation mine). Lote discusses such terminological pairs as manifestation of linguistic shortening which often produces „faulty semantic pinpointing of the features of the concept, morphological and syntactic errors“ (Lote 1971: 32; translation mine). Terminological variation can be found with pairs/groups of terms having the same linguistic form, e.g.: phrases, which are used interchangeably, e.g.: *acid-coagulated (fresh) cheese*, *acid-set cheese*, *sour-milk cheese* (Bulg. сирене с киселинна коагулация), *agar slope*, *agar slant*, *slant culture*, *sloped agar* (Bulg. полегат/ наклонен агар). Danilenko calls these groups of terms „synonymous terms „in a natural form““ (Danilenko 1977; translation mine) suggesting that variation is here attributable to borrowing from another language of some of the terms or to the fact that some of them are outdated. Despite the genre characteristics of the language of science, we think that it is not always appropriate to look for such reasons for terminological variation because it is possible that the doublets are used with an equal

frequency, their appearance being due to the individual preferences of the language user.

In some cases, however, a term in such groups of terms is either a borrowing or an internationalism and the terminological variants have the same or a different linguistic form, e.g.: *homologue* (from Greek) and *related compound* (Bulg. хомолог, родствено съединение), *testa* (from Latin) and *seed coat* (Bulg. семенна обвивка), *creta praeparata* (from Latin) and *prepared chalk* (Bulg. изкуствена креда). Terminological variation is also produced when both terms are borrowings into English, e.g.: *dysbiosis*, *dysbacteriosis* (Bulg. дисбиоза, дисбактериоза).

An interesting source of terminological variation in English is the regional specificity in the terminology used in the English-speaking countries. Although the United Kingdom (UK), Canada, Australia (Austr.) and the United States of America (USA) use the same terminology pertaining to a given sphere of knowledge, we have come across some differences. The presence of regional terminological variants is a defect of specialized language if we bear in mind the fact that terminology is subjected to unification and standardization. Here are some examples: *corn flour* (UK)/ *cornstarch* (USA) – Bulg. царевично нишесте; *cracking of pasta* (UK)/ *checking of pasta* (USA) – Bulg. напукване на пастата; *low-grade flour* (UK)/ *clear flour* (USA) – Bulg. слабо брашно; *screenings* (UK)/ *dockage* (USA) – Bulg. примеси, отсевки; *wheatfeed* (UK)/ *shorts* (USA)/ *pollard* (Austr.) – Bulg. пшеничен паспал.

Sources of Terminological Variation in Bulgarian

As a whole, the sources of terminological variation in Bulgarian are the same as those in English. We can give examples of:

- Abbreviation/ акрониму, e.g.: *сух безмаслен остатък* > *СБО*, *повърхностно активно вещество* > *ПАВ*;
- Clipping, e.g.: *логаритмична фаза* > *лог-фаза*, *изоензим* > *изозим*, pointing out, however, that both the short form and the full form of the term are often borrowings into Bulgarian;
- Presence of eponymous terms, e.g.: *метод на Гербер* and *бутирометричен метод*;
- Presence of terms in the form of phrases and terms in the form of simple or complex words, e.g.: *психрофилна бактерия* > *психрофил*, *апарат за зреене на сметана* > *сметанозреен танк* > *сметанозрейка*;



• Simultaneous existence of borrowings and international words, e.g.: *конюгирана двойна връзка* and *спрегната двойна връзка*, *атенюирана закваска* and *отслабена закваска*. Bulgarian terminology is characterized by the fact that some borrowings are of Turkish origin, which probably indicates that they came into existence before their terminological analogue, e.g.: *гюбек* (from Turkish)/ *пън* (fresh cheese as a leftover from the manual moulding of the cheese loaves). There are terminological variants in Bulgarian which have a regional character like some English terms but this is due to their dialectal origin, e.g.: *какалашка* (the dialect of Chiprovtsi; the dry innermost part of a corn cob). The non-literary source of the term does not correspond to the genre characteristics of scientific language. The recommendations to terminology are also violated by the existence of terminological variants in Bulgarian which belong to colloquial language, e.g.: *видалче* (a Durham test tube). The presence or absence of another term with the same meaning sometimes determines whether in specialized communication the language user opts for the colloquial/ dialectal term or not. The pragmatic aspects of specialized interaction are also important in this case since the usage of such “non-literary” terms is obviously considered appropriate in certain contexts.

Conclusion

Terminological variation (terminological doublets) is hard to avoid although terminologists believe that we are to adopt solely the terms long established in terminological usage worldwide as well as those manifesting stable system links in the given terminological field (Manolova 1984: 26-27). The basic problem is, however, the interdependence of general language and scientific language which do not exist in isolation because those who use scientific language are also general language users: abbreviation, acronymy, clipping, the formation of eponyms, borrowing, etc. are all at the disposal of both general language and scientific language. As Mitrofanova asserts, terminological lexis is distributed into three layers: terminology typical of the terminological field; general language words with specialized semantics; borrowings from other languages. Although scientific language possesses these characteristics, it does not exist as an artificial language (Mitrofanova 1973: 52). Therefore, the requirements concerning the linguistic form and the meaning of the term are largely idealized. Despite the goals which terminologists set for themselves,

scientific language users' attitudes and the development of the scientific sphere itself also affect the way in which terms appear and gain acceptance in the terminological subsystem.

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