

*John Humbley**

Is terminology specialized lexicography? The experience of French-speaking countries

Résumé

La terminographie se réduit-elle à la lexicographie spécialisée? L'expérience que les pays francophones ont faite de la terminologie donne à penser qu'il s'agit plutôt de deux méthodologies proches, qui puisent en partie, mais non exclusivement, dans les mêmes sources, et qui ont des finalités qui ne sont pas nécessairement identiques. Une part importante de la distinction serait d'ordre culturel, et nous proposons une explication personnelle de cette spécificité, qui, en France comme au Québec, lie la terminologie, et donc la terminographie, à la politique linguistique.

1. The specialized lexicology/terminology debate

1.1. Bergenholtz' challenge

In 1994 the present writer was delighted to hear that at long last a text-book for specialized lexicography had been published by the Danish specialists Henning Bergenholtz and Sven Tarp (1994). The pleasure of discovery of this pioneering introduction was however somewhat marred, at least for this reader, by what seemed like a blind spot, an almost total silence observed on the point of what terminology has to offer to the making of technical dictionaries. After some searching, it turned out that terminology was relegated to structuring extremely detailed vocabulary, a rather minor point.

The position of the authors is made more clear in a preliminary note to their English version of the handbook, perhaps after expressions of surprise from the not inconsiderable Danish terminology movement.

* *John Humbley*
Centre de terminologie et de néologie
LLI, INaLF, CNRS
Université Paris XIII
F-93430 Villetaneuse

Terminology, at least that part of terminology called terminography, is considered by these authors to be part of lexicography.

The challenge as such was issued in *Lexicographica* 11, when Bergenholtz (1995) made clear his point of view. Terminologists are viewed as having hegemonistic designs on specialized lexicography, embodied most notably and officially in the ISO 1087 standard, where it was stated that *terminography* replaced the older (and thus obsolete?) forms of *terminological lexicography* and *special lexicography*, a formulation which has since been abandoned. Terminologists could be seen to be making a take-over bid on an important part of lexicography, raising the question of the difference or the identity of the two fields. To clarify the matter, Bergenholtz (1995 : 51) put forward three propositions for a demarcation. The first gives the aims of terminography as a description of special language and the aim of lexicography as a description of general language. The second apportions terminography to terminology, and special lexicography to lexicography, the two having parallel and distinct tasks and methods. The third equates specialized lexicography with terminography, being part of lexicography; terminology is said to have an independent existence, practised in companies and in national or international terminology committees. After examination, he dismisses the first two propositions, and generally accepts the third, tantamount to terminology's take-over bid reversed.

It should be mentioned here that, as Bergenholtz quite rightly points out, terminologists, perhaps perversely and certainly inconsequentially, often use terminology in several different meanings : Bergenholtz (1995: 51) gives four, Bruno de Bessé (1994 : 136) five! We shall henceforth attempt to keep the issue as clear as possible and refer to terminography rather than terminology to refer to "the recording, processing and presentation of terminological data acquired by terminological research." (ISO 1087, and Bergenholtz' *Terminologie*₄ (Bergenholtz 1995 : 52), but *terminology* will be used when quoting authors for whom this is a superordinate term, encompassing, among other subfields, terminography. The extent to which terminologists use *terminology* for *terminography* does indeed suggest that the distinction is not always pertinent, perhaps because terminology implies terminographical work to a greater extent than lexicology implies lexicographical work.

This simplification, though necessary for practical purposes, does not reflect other aspects of potential distinctions between terminology

and terminography which some French specialists have gone into. For Bruno de Bessé, for example, there is a difference between a terminological definition and a terminographical definition. The latter is the definition found in a dictionary, representing the description of a specialized lexical item in a particular subject field, whereas the terminological definition is that of the creator, or at least the primary definer of the concept, be it a scientist or a legislator (Bessé 1990a : 253-254). Henri Béjoint (1993 : 19) takes up this distinction, under a different denomination, suggesting that a terminological definition can have a normative function, this being specific to terminology, whereas the “cognitive” function of the terminological definition is the same as the lexicographical. These two approaches suggest that the relations between terminology/terminography and lexicography, specialized or not, are overlapping rather than inclusive.

The purpose of the following reflections is not to fan the flames of any burning controversy, but rather to examine a question that has not yet been adequately addressed by French terminologists in general and by the Centre de terminologie et de néologie in particular. Is there indeed a difference between terminology and specialized lexicography? If there is, what is the correct method to adopt for the work that the centre has to do?

1.2. The position of the CTN

The Centre de terminologie et de néologie (CTN) was created in 1987 within the framework of the Institut national de la langue française (INaLF), a federative body of research laboratories concentrating on the study of French lexicon. From its inception, the CTN, under the direction of Pierre Lerat, proceeded to map out a set of principles on which to base its terminology work, which have included producing specialized vocabularies, recording scientific and technical neology and engaging in other works of terminology, notably with various official and unofficial French-speaking institutions. The doctrine was based on the works of the Viennese founding fathers, Wüster and Felber, and on those of the contemporary Québec authors, but corrected by a strictly linguistic, Saussurian rereading. Thus, the term record model adopted by the centre included not only generic/ specific and part/whole relationships as embodied in Wüster, but also such more typically linguistic criteria such as typical predicate, argument, thus

assuring a linguistic foundation (see Lerat 1988, 1989). This novel mix, or so it was felt at the time, did not preclude close cooperation with the rest of the INaLF, which has long pursued both traditional and innovative lexicography, and its material realisation, or *dictionarics*, as its former director, Bernard Quemada (1987), usefully termed it. This collaboration has at times posed both theoretical and practical problems similar to that announced at the beginning of this article. Bergenholtz' provocative stance has thus provided a welcome opportunity to clarify some points of method which have for too long been taken for granted.

2. A sociological viewpoint

Bergenholtz is certainly on strong grounds when he identifies the terminologists' striving for recognition in academic circles as a point at which terminology has parted company with specialized lexicography. This is an informal sociological or cultural explanation, which may well hold in some academic circles in certain countries, but not in others. Terminology is practised differently, and thus viewed differently from place to place: some language communities have not much gone in for terminology (the USA is a case in point), others, the French-speaking ones in particular, have so much more, and this affects the perception of what terminology is and how it relates to lexicography. Part of the surprise in reading Bergenholtz' criticism comes from the fact that, from a francophone point of view, reality is perceived differently. It is thus proposed to give a summary of how terminology is viewed in these countries, and this account is necessarily a personal one.

2.1. Terminology as an academic study in France

In France, terminology as studied in universities before the late 1980's was very much an offshoot of lexicology, for decades a French speciality on the international academic scene. Where else, for example, was there an equivalent of the *Cahiers de lexicologie*, launched in 1959? Terminology was also closely if somewhat imprecisely linked with lexicography. The main academic proponents of terminology in France in the period have been Bernard Quemada, perhaps better known as director of the 16 volume general language dictionary *Le Trésor de la langue française*, and Alain Rey, author of the *Robert*

dictionaries. Special vocabulary was prominently present in general linguistics too, particularly through the work of Louis Guilbert. Though Louis Guilbert died young, his work was carried on in varying directions, including the important and innovative school of socioterminology at the University of Rouen (see in particular Gaudin 1993).

Such illustrious proponents meant that terminology enjoyed academic recognition if not on a par with lexicology, at least of similar date to the academic interest in lexicography. In 1996 the French national research foundation, the CNRS, created an official research position in terminology, appropriately in the language sciences section. The relations between these three branches of linguistics are however far from being clear-cut or watertight. It is difficult to find in France an aggressive stance on the separate nature of terminology such as Bergenholtz suggests, though such lexicographers as Quemada or Rey draw attention to differences in both aims and methods (see in particular Rey 1979 : 52-54). In French academic life, terminology as a study grew out of lexicology, and not in opposition to it, just as, for Bernard Quemada, dictionaries grew out of lexicography, which itself draws on lexicology.

3. Historical development of terminology in French-speaking countries as related to aims

Terminology in France and other French-speaking countries is however not confined to studies carried out in universities. It is also used as a tool to quite specific and practical ends. These are traditionally held to be standardization, specialized translation, language planning, and, more recently what is sometimes called knowledge engineering or artificial intelligence. Documentation is sometimes claimed to be another field where terminology can render services. In pursuing the sociological overview, we now examine briefly how terminology came to be used in a more autonomous manner in these various fields of application. It will be seen that the particular orientation that terminology took in these countries, France and Québec in particular, was largely due to language planning concerns.

3.1. Terminology and documentation

The list of applications which we suggested in 3 only tentatively includes documentation or information retrieval. This is because the rela-

tionships between terminology and documentation, at least in the countries with which we are concerned, are perhaps most accurately described as parallel rather than convergent. While there is much in common in both the aims of these two activities (producing sets of words enabling a user to access information), their methods (culling texts to extract these words) and their experimentation (with computer-assisted extraction), there has been little cross-fertilization, perhaps because of the differing backgrounds of the protagonists : in France, most documentarians have a training in library management, and most terminologists in translation. Where the two methods are found to be presented together, it is in such advanced courses as at the Institut de sciences politiques in Paris, where documentation and linguistics are taught together.

3.2. Terminology and standardization

Owing to the international orientation of industrial standardization and its terminological back-up, the experience of French-speaking countries in this respect has not been specifically different from that of other countries, and it is partly through official standardizing organizations (ISO in general and TC 37 in particular) that the methods held to be typical of terminology were made known in French-speaking countries. As is well known, TC 37 was set up at Wüster's instigation, first in the pre-war ISA and then in the ISO, and the secretarial infrastructure is still provided by Infoterm. It can thus be regarded as fully representative of the approach of Wüster and of his successors, sometimes referred to by the socioterminologists of the Rouen school as "classical" or "dominant" terminology (Gambier 1991 : 49). French as one of the official languages of international standards, both of ISO and the International Electrotechnical Commission, has probably also led to Viennese terminological methods being disseminated into French and Canadian institutional circles, though the impact on business or university circles has perhaps been lesser.

3.3. Terminology and technical translation

The needs of technical translation depending as much on the field concerned than on the country it is to be found in, the experience of French-speaking countries is special because of language planning

policies. In both France and Canada, but also in Switzerland and Belgium, it is in the context of translators' courses that most teaching of terminology now goes on, both in translators' and interpreters' schools, and in such universities courses combining such subject fields as economics and commerce with languages, such as the French *Langues étrangères appliquées*. Most of these courses which do not yet have a terminology component plan to introduce one, and all in all there is today more teaching of terminology in French-language higher education than there ever has been, though in many cases terminology tends to be very much a service course. Courses in lexicography on the other hand have tended to be more specialized, such as the international post-graduate course *Diplôme européen de lexicographie* run by Danielle Corbin in Lille, and there are fewer of them.

The particular orientation of terminology in French-speaking countries comes from the use to which it has been put in language planning situations.

3.4. Terminology and language planning

In establishing the now classical distinction between *status* and *corpus language planning*, Kloss (1969 : 81) mentions terminology as the main though not exclusive area of concern of the latter branch, and it is not by chance that this distinction was made while Kloss was in Canada. This activity, now usually referred to as *aménagement linguistique*, since Corbeil (1980 : 9), was incorporated as an integral and major part of Québec's "révolution tranquille" of the 1970's. The role terminology played in this process gave it the prominence it enjoys today on both sides of the Atlantic. For an appreciation of this role, the reader should refer to the many very thorough studies done by the Conseil de la langue française (for example M.-E. de Villers 1990), and the Office de la langue française (for example C. Loubier 1994). The few points made in the following merely highlight the emergence of terminology as an autonomous entity.

3.4.1. Terminology in language planning in Québec

It will be remembered that one of the major claims in 1970's Québec was the right to work in the people's mother tongue. French had been effectively used in schools, courts and church since the British con-

quest, but economic life had been progressively confiscated by the English-speakers, resulting in a large-scale anglicisation of broad sections of the economy. It was quickly found that it was not enough to convince companies to use French, as even where the good will existed, it became evident that where the technical vocabulary was missing, the effective use of French was heavily compromised. The solution that was eventually found was to produce the technical vocabulary necessary for its efficient functioning in French, in collaboration between the company and an official organization, the Office de la langue française. The Office produced small dictionaries, often of a few hundred terms, which covered the various vocabularies used in a company or a branch of the economy. The terms actually chosen were in principal those of standard French, though suitable accommodation was made for North American reality. The result was to acquaint many Quebeckers with terminology both as a tool for social change or means of democratic evolution, and as a factor in economic life, which accounts at least in part for the high profile it enjoys in that part of the world. It also gained social recognition from the new needs generated by the presence of French-medium organizations active in largely English-speaking North America, and the consequent need for large numbers of technical translators, a challenge which the universities had to meet from the 1970's on. Many of the larger translation departments in firms or government organizations found it judicious to institute a division of labour between those involved in translation and those whose job it was to provide the terminology which the former group needed. The creation of terminologist as a job description was another factor in establishing terminology not only as a new subject field, but also as a career opening.

From a theoretical point of view, the Quebeckers were undogmatic : the theory of both terminology and language planning was developed as it was needed, and quite often theory followed practice, providing tools for analyses of on-going programs rather than a preconceived framework. As terminology was actually implemented at the level of an organization, private or public company or administration, the systematic aspect of its elaboration, as proposed by Wüster, was largely followed. However the unit was often the sector of activity, rather than the subject field, as is usually assumed to be the case in terminology, though as mentioned, the printed vocabularies tended to be small and systematic, meaning that several could be necessary for a large firm. It is important

to note here that this pioneer terminography was at least partly user-driven, and not purely subject orientated, as is sometimes suggested for terminology (Bergenholtz 1995 : 55).

The need to train competent translators and terminologists led to courses in terminology being organized in the universities of Québec, and a number of handbooks were produced, notably those by Robert Dubuc (1992) and Guy Rondeau (1983). These introductions did not recognize specialized lexicography as such, and adopted the view that lexicography concerned general language and terminology special language, much in the same way as the handbooks published in Vienna.

3.4.2. Terminology and language planning in France

In France, terminology has also gained a relatively high profile through language planning action, rather differently than in Québec, even though the experience in that country profoundly marked both official and academic terminology throughout the period from the 1970's on. The official recognition of terminology came in the form of the Commissions ministérielles de terminologie, committees created within government departments to replace English borrowings used in their area of competence. Starting in the early 1970's, these committees worked with varying methodologies, and varying effectiveness. In some fields, such as computers and data processing, they were quite effective in reaching their goals, possibly by working in close cooperation with the industry, as most of the words proposed have effectively been adopted, though it is not clear as to whether this was by direct or indirect means. One of the results of the association of terminology with the Commissions ministérielles de terminologie was to equate terminology with language planning, or even language protection, often to the exclusion of its applications to industrial fields, such as specialized translating. One of the significant singularities of terminology associated with language planning in France is the non systematic treatment of vocabulary, and general absence of reference to the Vienna school of terminology.

Whether terminology in general in France has profited from this association is open to question, but it has contributed to giving terminology and terminography a different image from that of lexicography. For example, Fabienne Cusin-Berche (1993 : 145) divides specialized

dictionaries into two classes: technical (such as the *Dictionnaire de management et de contrôle de gestion*) and terminological (*Dictionnaire des néologismes officiels*), i.e. a relegation of terminology to the language planning sphere. Her analysis brings out, however, more similarities between these two types of dictionaries than with what she terms lexicographical, or general language dictionaries, more particularly from the onomasiological approach, but also in means of legitimisation. While this viewpoint is perhaps somewhat extreme, it is indicative of how terminology can be captured by one of its applications.

4. Terminography and specialized lexicography : differences of degree, not of kind

We suggest that lexicography and terminology are variable sets of composite practices rather than homogeneous blocks; this way of looking at the issue means that there are some activities or viewpoints that can be considered more terminological than lexicographical, or vice versa, according to the resemblance to an archetypal view of terminology/terminography and lexicography. To present the relativity of the differences between the two, we quote the fourfold distinction that Rondeau makes (Rondeau 1983 : 62-63), and argue the relativity of each point. Though Rondeau's statement is both clear and typical of francophone thought on the subject in the 1980's, it must be admitted that the distinction he is drawing is between terminology as a whole, and not simply terminography, compared with general language lexicography, and not special lexicography.

4.1. The object of study

The object of the study is, for Rondeau, the word in the case of lexicography, and the term in that of terminology. This distinction is taken up by the other handbooks, often with differing emphasis, and the relative nature of the distinction is obvious. Firstly, terms are words, so that terminology can be claimed to be a subset of lexicology (Cabré 93 : 86). Cabré claims that the goal of lexicology is to account for the native speaker's competence in the lexicon of his language, whereas that of terminology is to describe those words belonging to a given field. Words or groups of words thus become terms when used in specialized fields and correspond to the concepts of those fields,

defined in relation to those fields. From this rough and ready definition, it is clear that a word can be a term in certain contexts and not in others. Criteria given by various terminologists to distinguish words from terms are ones of degree rather than kind. One of the major distinctions is that of a drive to reduce polysemy and synonymy, which we shall briefly examine in order to bring out the relativity of the distinction.

That one word particularly represents a concept of a subject field, and that this concept is regularly represented by one word, called a term, is a basic postulate of both terminology, and other related fields, such as automatic information retrieval. The term is also more independent of context than ordinary words (Lerat 1995 : 45). The degree of difference however is sometimes suggested to be so tenuous that its practical use is compromised.

Taking the question from the point of view of artificial intelligence, Daniel Kayser for one finds little difference between words and terms as far as ambiguity is concerned. In the non specialized context of the account of an accident, it is found that *rond-point* (“roundabout”) is used for the whole of the traffic installation and for the central part of the installation (Kayser 1995 : 24). But even in a specialized context, that of instructions for a computer program, the term *champ* (“field”) is found to correspond to a variety of referents. The means of disambiguation and measures of “*glissement de sens*” suggested are not those of classical terminology.

To sum up Rondeau’s first distinction, we can say that the word/term dichotomy is a matter of setting: the term is viewed as a special word, the linguistic representation of the concept set in its subject field.

4.2. Point of view

Rondeau calls his second criterion *point of view*: lexicography is descriptive, terminology normative or prescriptive. Once again, it is not only easy to find examples of prescriptive lexicography and descriptive terminology, but the whole issue is more complex than this expression of dichotomy would suggest. Descriptive terminology is what F. Riggs (1988) recommends as a norm for the human sciences, for the INTER-COCTA project, as he regards prescriptive terminology as completely utopian, and finally of little use. It would seem more logical, if terminology is viewed as a methodology, to consider that it is the appro-

priate tool for one of its prime uses : that of standardization. Standardization using terminology need not take place in a national or international context : it can be used within an organization simply to make clear the concepts used. These may be extremely limited, such as the transport body Union des transports publics (1988) which produced a terminology of bus rotation, or more general, such as a review of certain terms used in the commercial sector in a large company (cf. Alory 1995). This activity is obviously different from lexicography, though lexicography may be used to commit the results to paper.

Among the other aspects of prescriptivity that Rondeau brings up is the question of neology. This places Rondeau's approach firmly within the language planning framework, in the context of French in Québec: if a term was not available in French to express a concept which had an English equivalent, then an appropriate term would have to be found in French. Extensive research was carried out on determining the most effective way of forging new terms (*néologie*). Such an approach is obviously wholly prescriptive and untypical of lexicography, though not unknown. Not all terminology work in French-speaking countries includes what L.-J. Calvet calls *in-vitro neology* (Calvet 1993 : 112-113), so while it is not an obligatory part of terminology, it is an optional one, and this would thus constitute another difference as regards lexicography, albeit again a partial one.

4.3. Method

The third criterion is the method : onomasiological for terminological, semasiological for lexicography. The relativity of the different approaches has become more and more patent over the years as far as terminology is concerned. Whereas it may be argued that early terminologists such as Schlomann and Wüster were subject specialists, and made up their terminology structure from their own intimate knowledge of the field they were treating, the same cannot be said today of terminologists with a linguistic or translation background, who are not subject specialists. They proceed semasiologically picking out term candidates from texts, be it either by hand or assisted by computer, often helped by the linguistic evidence of termhood given by the author of the text, for which there is a rich literature in French (see Chukwu, Thoiron 1989, Candel 1993). The onomasiological demand of terminology is met however in various indirect ways, the main one being that of the

tree diagram. This representation is designed to enable the terminologist to ascertain whether the terms/concepts of the subject field have been exhaustively treated and are put in relation one with another. While the tree diagram is a practical rather than a theoretical construct, it has been refined to include multidimensionality by such researchers as Ingrid Meyer et al (1992), a form of terminology close to artificial intelligence (knowledge bases), but not alien to lexicographical traditions either. The tree diagram of the specialized field is alternatively thought of as a particular kind of semantic network (Melby 1991 : 19), different from those of general language.

4.4. Lexicographical treatment

Rondeau's final criterion (suggesting indirectly that terminography is indeed part of lexicography) is that of lexicographical treatment. Two of his points will be considered here : the first containing the representation of the headword, the second the form of the definition. The headword in terminology is treated as a unit for multiword terms, and not broken up into component parts. Thus the artificial intelligence term of *conceptual dependency theory* will be represented in French as *théorie des dépendances conceptuelles* (Otman 1991) in a terminology style vocabulary, and not as *dépendances conceptuelles, théorie des* or even *conceptuelles, théorie des dépendances* as in a lexicography style dictionary. Electronic dictionaries do away with such considerations, as it is possible for the user to access any part of the word group, and for paper dictionaries, both terminology and lexicographically inspired dictionaries would do well to take a leaf out of documentalists' book in as far as the permuted lists are concerned, at least used as an index.

As to the form of the definition, terminologists use Aristotle's *definiens definiendum* principle, perhaps simplistically conceived. Rondeau claims that terminologists' definitions are more systematic than those of lexicographers. This could be so, to judge by one of the comments in Bergenholtz and Tarp (1994 : 153), where the authors recommend giving varying styles of definition to make for easier reading. In terminology, the cohesion of the concept structure is expected to be reflected in the definition, so strict adherence to what are in fact purely lexicographical conventions is recommended (for example Gouadec 1990 : 165 "Adopter une norme de construction de définition"). This means that exactly the same formulation of the *definiens* is sought, and

the definiendum is chosen to distinguish the term in question from any other of the subject field on the same level of abstraction. This criteria leads to a distinct separation of encyclopedic information from the definition itself. Bruno de Bessé (1990 : 253) indeed talks of an encyclopaedic definition as being different from a terminological definition in as much as they start off as a lexicographical definition and finish with encyclopaedic, non-defining material. The strict, highly controlled nature of the terminological definition leads some terminologists to question just who is supposed to use it; the expert knows the definition already and the lay person has not the subject field knowledge to cope with the elements of the definition, and finds more help in the encyclopedic notes, which the terminologist keeps strictly separate (Gouadec 1990 : 174).

All four distinctions thus seem quite relative and depend on the aim of the project in hand, suggesting that terminology and lexicography are both methodologies, and both closely related.

5. Terminography and specialized lexicography as sets

A variation of Bergenholtz' second proposal for a distinction between terminology and specialized lexicography will be attempted here. It will be remembered that this postulate stated in the first part that terminography is part of terminology and specialized lexicography part of lexicography, and in the second part that the two had differing aims, methodological procedures, and theoretical suppositions. From the point of view of many French-speaking countries, it would seem that the first part of the proposition would hold true, if being part of larger sets were not seen as exclusive. Terminography obviously owes its very basis to lexicography, and grew out of it in France in the situations which we have described. Specialized lexicography has, in the words of Bergenholtz himself, gained much from such common practices among terminologists as use of computers for data bases for storing and sorting data, and disquettes and CD-ROMs for its use (Bergenholtz 1995 : 53). But terminography in the French language tradition is part and parcel of terminology, such as it was developed over the last thirty years, and the original links with lexicology/lexicography have been weakened.

The second part of the postulate could be reformulated to include both methodologies drawing on other disciplines. Many writings on ter-

minology from about 1990 on have pointed out weaknesses and insufficiencies of the Wüster-based terminology and terminography, but these have not so far come from lexicographers. The first school of thought of sociolinguistic persuasion reproaches traditional terminology with not paying attention to the social conditions in which terms are produced and used and with obscuring the traits of dominance which terms carry (Gambier 1991). The second, text-linguistic orientation, is perhaps best represented by J.C. Sager (1990 : 140), who prefers to investigate the possibilities given by exploiting large specialized corpora rather than to attempt to formalize relations with the tree diagram or similar methods. The third is a practical reproach from translators, who cannot find enough “phraseology” in concept-oriented terminographies, and who have demanded new forms of terminological dictionaries which incorporate the syntactic information (local grammar) to enable them to put terms into discourse (*Terminologies nouvelles* 1993). These are only three of the attacks made on classical terminology in the last few years, though perhaps the main ones, and it is interesting to note that the dichotomy of lexicography/terminology has, to our knowledge, never been raised in these exchanges. It would be possible of course to say that the use of text linguistics has been pioneered by lexicographers, such as the Institut national de la langue française in France and the big language banks in England, or that the insistence on phraseology is a desire to see in specialized dictionaries such combinatory information as is available in say *The BBI Combinatory Dictionary of English*, which is quite true. But the opposition has not been seen as one between a terminological and a lexicographical tradition.

It would thus seem more in conformity to the perception of terminology/terminography versus specialized lexicography in French-speaking countries to say that both belong to - or at least should belong to and partake of - sets partly made up of the same components, and partly of different components.

6. A special language non terminological dictionary

Should there be a distinction made between special language lexicography and terminography? One such possible differences can be gauged from a current project of the Institut national de la langue française, a

dictionary of scientific French, under the direction of Danielle Candel. This project is defined according to a lexicographical orientation, and not a terminological orientation, simply because the focus of the dictionary is the words of science, and not the concepts of science. It is thus a language dictionary of words which are mainly terms, but which are treated from a predominantly linguistic, and thus lexicological point of view. The aim of the dictionary is to describe the vocabulary of scientific French, so the criteria for selection is representative rather than exhaustive; it is not proposed to include the vocabulary of all branches of science, only the most significant ones, and it is not intended to give an exhaustive coverage of the vocabularies of those branches chosen. The corpus is firmly text based, with all examples being taken from specialized texts on the subjects concerned, in the same manner as the *Trésor de la langue française* was elaborated. Like terminology however, all definitions are vetted by subject field experts, and where appropriate, standards are quoted. In the eyes of those responsible for the project the work is lexicographical rather than terminological, simply because of its language oriented focus.

7. Collaboration according to project in hand

The emphasis on the relativity of the differences between terminography and specialized lexicography is in large part a recognition of Bergenholtz' postulate. Terminography can indeed be seen as a subfield of lexicography. However, terminology teaches us that one concept can have more than one superordinate concepts, and terminography is a case in point: part of lexicography indeed, but also part of terminology, and part of linguistics. Daniel Blampain (1992) suggests that terminology (and terminography especially) is most effective in highly specialised fields, called *micro-domains* (1992 : 461), which are homogeneous enough to lend themselves to an adequate structuration. Specialised lexicography is more often thought of in vast fields, such as those envisaged by Bergenholtz and Tarp. It is obvious that this distinction is again one of degree and not of kind.

One conclusion which may be drawn from this review of franco-phone points of view is that terminology/terminography and lexicology/lexicography are overlapping sectors of activity, part of both being linguistic, and part extra-linguistic, though in varying proportions. The

obvious drawback of strict segmentation is that those who consider themselves terminologists will only read terminology journals and those who consider themselves lexicographers only lexicographical publications, with the result of mutual impoverishment. But is this effect any worse than the current language and language-group cleavage, which leaves European linguists in ignorance of the research carried out in the country next door or next door but one? One possible solution is the publication of such multilingual, multidisciplinary collaborative efforts such as the present volume.

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