Pedro A. Fuertes-Olivera (ed.).
Specialised Dictionaries for Learners

1. General presentation and structure

The work under review, edited by Pedro Fuertes-Olivera (University of Valladolid, Spain), is a Festschrift in honour of Professor Enrique Alcaraz Varó (University of Alicante, Spain). Professor Alcaraz (who died in 2008) was an academic, a sworn translator, and a dictionary compiler, who dedicated most of his career to LSP and translation (in particular in the field of English Law), and thus inspired a change in direction in English studies in Spanish universities. It is worth noting that the contributors to this collection were chosen not because of their acquaintance with Alcaraz, but because they were scholars who "could make a real contribution to the development of pedagogical specialized lexicography" (p.2), which is the focus of this book. This might account for the fact that Alcaraz's works are only cited in two articles, which seems surprising at first sight.

After a preface by the editor, a short tribute to Alcaraz Varó and a selected bibliography of his works by two of his former students, the core of the volume is divided into three (unequal) parts. The first, which represents almost half of the book, comprises five papers by advocates of the Danish 'Function Theory' of lexicography – either founders of the theory or disciples – that show how it can contribute to the development of specialized learners' dictionaries (SLDs). The second part groups four papers dealing with the contribution of linguistics as a whole to the development of SLDs, with a particular emphasis on culture-bound items, figurative meaning, lexical semantics and actants, and corpus linguistics. The third part contains only two papers, intended to pave the way for new developments in SLDs in two promising areas: Chinese lexicography and Internet terminological dictionaries. The book ends with a two-fold bibliography of the dictionaries quoted within the book (approximately 60) and other literature. There are also useful notes on the contributors, and a name and subject index. There is no general conclusion to the work.

This volume is the first, to our knowledge, to explicitly bring together the dual issues of specialized dictionaries and learners' dictionaries, i.e. SLDs. We thus expect to find here a discussion of the notion of 'learner', a rather complex concept since it can refer to the learner of a language or o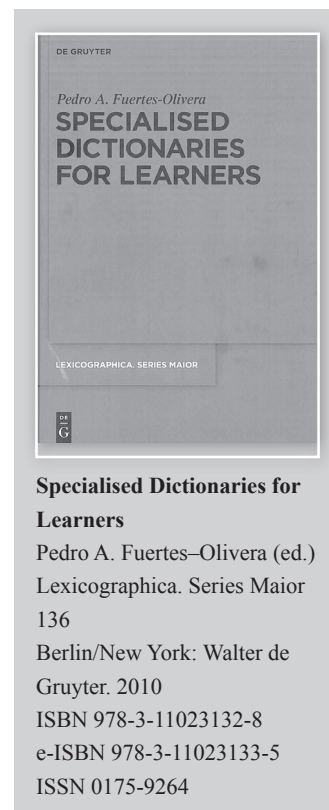f a specific field of interest; as well as of both theoretical and practical considerations related to the purposes and the designing of dictionaries aimed at this particular category of user.

2. Description of the chapters
• Part I

The very first chapter, Henning Bergenholtz and Sven Tarp's paper entitled "LSP Lexicography or Terminography? The Lexicographer's Point of View", sets the tone for the first part of the work, which is deeply rooted within the framework of the Function Theory (FT) developed at the Aarhus School of Business in Denmark. Along with the second chapter, also by Tarp, it outlines some of the tenets of this theory relating to user needs and the functions of dictionaries. The last three chapters focus on particular types of dictionaries: Chapter 3 deals with monolingual SLDs while Chapters 4 and 5 both focus on bilingual ones.

Chapter 1 opens with a discussion about the difference between lexicography and terminology. The authors, who insist on saying the title of their paper was not their own choice but the editor's, claim that there is no clear dividing line between specialized lexicography and terminography, which they actually envisage as synonyms. Although most of the arguments put forward are valid, the last one, about 'research funding' and 'influences and positions at universities', seems debatable. In what appears to be a response to one of Humbley's papers (2002), the authors demonstrate that the FT bridges the gap between specialized lexicography and terminography and does not widen it. To do so, they focus on the concept of user needs, which, they say, is very closely linked to the specific situations the users are in. Quoting Tarp (2008), they explain that "a lexicographical function is defined as the satisfaction of the specific types of lexicographically relevant needs that may arise in a specific type of potential user in a specific type of extralexicographical situation". They list nine criteria to be used when drawing the profile of dictionary users, then remind the readers that the FT distinguishes between three types of situations: cognitive, communicative and operational. The rest of the article focuses on two main types of communicative situations: translation and reception. The section on translation tries to show how two translation dictionaries in which the authors were involved (the English Gene Technology

Dictionary and Spanish Gene Technology Dictionary, 1998) meet the needs of their intended users (translators of specialized texts) because those had been anticipated by the compilers. The dictionaries thus provide knowledge on the subject field by means of systematic introductions to the field of molecular biology, and cater for the needs of the translators through every phase of the translation process: translators can find explanations in the mother tongue for the understanding phase, equivalents with relevant meaning discrimination for the transfer phase, and grammatical and syntactic information for the production phase. In the section dealing with reception, the authors introduce the difference between lay people, semi-experts and experts, and show how one single headword, *RNA*, has (or could have) two different definitions in the *English Gene Technology Dictionary* depending on the user's level of expertise. In the concluding remarks, while the authors seem to express doubts about whether terminographers are as interested in user needs as specialized lexicographers, they maintain that a "superior theory for a tool for specific needs" is much wanted, no matter whether it originates from lexicographers or terminographers.

As mentioned above, Sven Tarp is also the author of Chapter 2, entitled "Functions of Specialized Learner's Dictionaries". He postulates right from the start that "the very concept of a specialised learners' dictionary can only be defined by determining the possible lexicographic functions which these dictionaries may have". He claims that, so far, studies on SLDs have limited the concept of 'learner' to that of the learner of a language, neglecting those acquiring knowledge about a specific field. Before outlining what he means by lexicographic functions, Tarp explains that the user's needs are punctual and situation-dependent information, which leads him to analyze the various types of situations related to the learning process. A learner must acquire knowledge, but also skills, which he/she finds necessary to divide into two main categories: communicative/linguistic skills and practical skills. The former consist mainly of skills for text reception, text production and translation – which can be further sub-divided into 24 sub-categories, while the latter may be interpretive or operative. Knowledge and skills, he argues, are distinct categories, even as far as language is concerned. While knowledge can be rather easily acquired by learners, two mediating elements are required to transform the information retrieved from the dictionary into linguistic skills and practical skills: communication

and practical exercices/training. During the learning process, the learner also finds him/herself in various cognitive situations where the SLD can be of great help. For instance, when the learner systematically studies the subject field, he/she may find it useful to turn to a dictionary (instead of a handbook) to have a systematic overview of the field, such as the ones found in the above-mentioned Gene Technology dictionaries, or a systematic introduction to its specific LSP. In addition to cognitive situations, which are the "easiest to deal with" according to Tarp, communicative and practical situations are those in which an SLD may also satisfy users' needs in a way that should be further investigated. By combining the user profile with the various situations described, the lexicographer may be able to identify the essential functions of an SLD. Although the chapter is well-written and most of the explanations are clear, more examples would have been welcome.

Chapter 3, by Rufus H. Gouws from the University of Stellenbosch in South Africa, focuses on a particular type of SLD: the monolingual one. It starts with a much needed discussion of the concept of the learner, which is twofold in the case of pedagogical specialized lexicography: it can refer to the learner of a language or to the learner of a subject field. Each of these two types of learners can be further sub-divided according to their degree of competence or knowledge, which has to be taken into consideration by the lexicographer. The language learners can thus be sub-divided into beginners, intermediate and advanced, while those of a subject field can be lay persons, semi-experts or experts. For the author, the average user of an SLD is a semi-expert at the intermediate language level. After analyzing dictionary users in accordance with FT criteria, the author examines dictionary functions. He believes that, contrary to what is advised for *general* learners' dictionaries, in SLDs text production should be given more prominence than text reception. This means that fewer lemmata can be included, but included items have to be given a more comprehensive treatment. Gouws makes the point that the dictionary structure should logically result from the analysis of the dictionary functions and deals with the following aspects: (i) data distribution: he insists on the importance of including texts dealing with issues related to the subject field outside the macrostructure (called "outer texts"); (ii) access structure: very interesting suggestions are made regarding ways of improving information retrieval in the dictionary depending on the needs of the user – the example of a possible treatment of the term *nitric acid* is

particulary convincing; (iii) microstructure: the discussion about the treatment of meaning and the phrasing of the definitions depending on the profile of the user is very relevant and the author also suggests adding a bilingual dimension to the microstructure, while specifying that this would limit the target user group; (iv) grammar: since SLDs are more geared towards production, grammatical data should be included, but outside the entry proper so as not to impede access to subject-specific data. The next section discusses the problems related to the type of monolingual specialized dictionary to be produced, (basically single field versus multifield), in particular the placement and ordering of outer texts to which the author seems rightly attached. The last section related to culture-dependent or culture-independent items is rather disappointing as it only alludes to the issue, which would have warranted a more in-depth analysis, but this gap is partly filled in Chapter 6.

With Chapter 4, by Sandro Nielsen from the Aarhus School of Business, we move from the monolingual dictionary to what is specifically called *specialized translation dictionaries for learners*, within the framework of the FT. The author makes the case for dictionaries that view translation as a whole, not limited to term-to-term equivalence (it is texts, not words, that are translated). He is very critical of what he calls the traditional specialized dictionary (though giving no precise reference) which, according to him, only helps to translate a small portion of LSP texts. He feels that too little attention has been paid to research in the field of translation studies, which is more useful to specialized lexicographers than surveys dealing with LSP translation that provide them with only vague 'hints' of what to do. The findings of translation studies that seem most useful to him are the following: translation is concerned with units larger than words; the clause and sentence levels are of primary importance; and, the receiver's perception of the target text is increasingly important. Just like Gouws in the previous chapter, Nielsen identifies several categories of users depending on their degree of competence in the language or the subject field, but admits that the categorisation of users is very hard to do. For him, the most common user of an SLD is a lay person or a semi-expert "at the best", which is a slightly different view from Gouws's. He also recommends that lexicographers identify the factual, linguistic, textual and cultural competences of the intended users. The rest of the article is devoted to two focal points of LSP translation: linguistic structures and genre conventions. The third focal point, terms (which includes collocations), has already received much, if not too much, attention according to him. Since syntactic structures in the source language and the target language can differ considerably (he gives the example of structures typical of the Danish and German legal language, which are not found as such in French and English translations), he insists that contrastive information should be given in the dictionary. As far as genre conventions are concerned, he states that learners must produce translations that conform to the conventions of the target language culture: they must therefore be systematically made aware of differences in cases such as the use of capital initial letters in some specific genres or sub-genres. He proposes that all the information relating to syntactic structures, genre conventions and what he calls "translation strategies" should ideally be placed in separate sections in the back matter, and these sections should contain illustrative examples that show translation strategies. For him, the best dictionary is a single-field dictionary, possibly with an electronic dimension, that focuses primarily on usage, and can be considered as an augmented reference tool.

Specialized translation dictionaries are also the focus of chapter 5, by Ildikó Fata, a Hungarian lexicographer from the University of Pilicscsaba. At first sight, two chapters on the same topic may seem redundant, but the two are rather different. Although the article is divided into several sections (the numbering of which is not really clear when references are made within), it actually consists of two main parts: a theoretical part based on the FT, describing the specialized translation dictionary as a particular type of dictionary, and a more practical part consisting of a report on a bilingual German-Hungarian dictionary in the field of pension insurance, explicitly aimed at translators and interpreters, in which the author was involved. In the first part, Fata shows that bilingual specialized translation dictionaries are at the crossroads of several scientific disciplines, drawing on the findings of translation studies, metalexicography, corpus linguistics, LSP research and terminology. Since the author adopts Tarp's definition of a translation dictionary as one "designed to assist the user in solving problems related to the translation process" (2004), she finds it useful to rely on a model of the translation process also adopted by Tarp (2007), to identify the various functions of the dictionary in relation to each of the steps of the process. In accordance with Nord (2002), she includes bilingual specialized

dictionaries among translation auxiliary materials. This section would have merited clearer treatment, all the more so as some quotations or figures (e.g. Figure 6) have not been translated from German and are not understandable for people who do not master this language. She also mentions a survey without giving sufficient information about it. In short, the first part of the article could have benefited from the inclusion of more examples. In the second part, which seems slightly disconnected from what preceded, she explains the context of developing Hungarian metalexicographic research which has led to the publication of the translation-oriented bilingual LSP dictionary of pension insurance. Although the main target users are native Hungarian translators and interpretors, five other categories of potential users with varying backgrounds were identified (for instance, pension experts who have excellent knowledge of the field but little knowledge of its LSP). Since the range of target users is very wide, the macrostructure had to take into account what was the minimum and maximum background knowledge required. The number of user situations envisaged was up to 18, the most interesting being those grouped under the heading 'operational-orientated user situations', whose treatment is however not discussed at all. The 'introduction' of the dictionary is mentioned several times but never quoted. Finally, the author claims that the novelty of the dictionary lies in the fact that each part is bilingual, something that is in fact not uncommon. The last section is devoted to the pedagogical dimension of the dictionary, which is interesting and could have been further developed. For instance, more concrete detail on how the corpus that was designed helped to compile the entries and the so-called 'mini-contexts' would have been welcome. All in all, this chapter would have been better served focusing on one aspect rather than two, the theoretical or the practical.

• Part II

The second part deals with the treatment of specific linguistics topics in relation to SLDs. The notion of culture is the first to be dealt with, in Chapter 6, by Aquilino Sánchez, from the University of Murcia in Spain. The article discusses at great length the intricate relationship between language and culture, showing that language is a tool for the transmission of cultural knowledge, and that cultural features "are necessary ingredients for a complete understanding of a word", and as such cannot be dissociated from words. Some examples are taken from everyday language, such as *breakfast*

in English and its so-called equivalent in Spanish, *desayuno*. The author insists on the fact that cultural features are best identified when two languages are compared, and quotes the well-known example of the various ways of referring to *snow* in 'Eskimo languages', as well as several examples from legalese in English and Spanish. He extends the problem to that of the varying 'semantic space' between several languages, relying on the in-depth contrastive analysis of *wood* in English and *bosque* in Spanish. The section devoted to 'culture in traditional lexicography' states that dictionaries have rarely paid direct attention to the cultural dimensions of words, but no traditional dictionary in particular is analyzed. Later on, though (in section 5), there is a critical presentation of LDELC. Two main drawbacks are pointed out: the first has to do with the format of the dictionary, whose linguistic perspective is too traditional; the second concerns the inclusion of cultural notes, whose very existence seems to indicate that language and culture are two separate things, something unthinkable from the author's point of view. It is only in section 7 that the reader finds some (heterogeneous) analyses of cultural items in existing dictionaries, some of which are not specialized. Surprisingly enough, the solutions proposed by Svensén (1993) are barely commented upon. In short, the author does not add much that is new. While he does outline interesting possibilities for future development such as the notion of a culture-dependency scale, or the idea of using Elementary Meaning Units to identify the cultural elements, these ideas are not developed. And while specialized dictionaries, either monolingual or bilingual, are discussed, SLDs are not, which puts this article outside the scope of this volume.

Chapter 7, by Geart van der Meer (University of Groningen, the Netherlands) is the shortest of all chapters. It tackles the very complex subject of the treatment of figurative meaning in monolingual SLDs. After stressing the importance for a learner of a specialized language to make the link between the metaphorical meanings and the literal meanings of a word or expression so as to grab their full meaning (something which is part and parcel of the native speaker's competence), the author analyzes several examples taken from the business field, comparing definitions from various specialized dictionaries. He convincingly argues that it is more than desirable for a dictionary to make learners aware of what he calls the "double-sidedness" of the words, but then very honestly questions the feasibility of it in a monolingual SDL.

He comes to the conclusion that for some metaphors whose origin is rather obscure (like *benchmark*), there is no need for a tentative explanation in the dictionary, but that for others whose origin can be traced back (like *bubble* or *scorched earth policy*), some information should be presented to the user. The least space-consuming solution lies in the wording of the definition, which, thanks to collocations or words suggestive of the literal field, could help the learner make a link between the basic sense and the metaphorical one. He actually undertakes to adapt some of the definitions found in existing dictionaries, which proves a success.

With Chapter 8, we are back to purely linguistic matters: Marie-Claude L'Homme (University of Montréal, Canada) examines the treatment of arguments ('actants' in the theory of Explanatory Combinatorial Lexicology developed by Mel'čuk et al., cf. 1995) in several existing dictionaries, and reports on her team's project to turn what was a rather formal terminology database, the *DiCoInfo*, into an SLD in the field of computing and the Internet. After a very useful review of the way five existing dictionaries (among which a learner's dictionary such as COBUILD, and an SLD such as DAFA) deal with the problem of actants (through pronouns, a numbering system, general semantic labels, etc), she presents the original database of *DiCoInfo*. That database, unlike former specialized dictionaries, does not focus on conceptual information, but rather on linguistic information; moreover, it is clearly corpus-based, and does not limit itself to the noun grammatical category. Through the example of the entry *Internet*, the reader is shown the various information categories that appear in the entries, among whose striking features are the actantial structure, the linguistic realizations of actants and the lexical relation section. In the original version of *DiCoInfo*, actants are presented by means of actantial roles described by fifteen different labels, the most common being Agent, Destination, Instrument and Patient. These labels may sound familiar to linguists, but are definitely opaque for most users. This is the reason why the *DiCoInfo* team undertook to (automatically) convert the existing labels into more user-friendly ones. Relying on the above-mentioned review of the way actants are presented in existing dictionaries, the team decided, for various reasons that are very clearly outlined, that the most appropriate means of representing actants would be to resort to typical terms (as in DAFA). A thorny issue is the choice of the ideal typical term: several criteria are suggested, but the author shows how difficult it is to combine all of them. Since learners always have difficulty with actants, and especially when dealing with LSP, this paper usefully feeds the discussion about SLDs both from a theoretical and a practical point of view.

The last chapter of the second part is dedicated to corpus linguistics. Lynne Bowker (University of Ottawa, Canada) first reviews the main lexicographic concepts at stake, i.e. specialized dictionaries, learners' dictionaries, SLDs – concepts that have either already been defined or should have been defined earlier in the volume. Quoting Varantola (2003), she interestingly points out that a learner is rather different from a non-native speaker. The most novel part of this review lies in the presentation of what can be called *hybrid* learners' dictionaries: dictionaries, such as MEDAL, which mainly deal with general language but tend to include a very large number of specialized terms. In the next two sections, she first explains the fundamentals of corpus linguistics, defining the term *corpus*, showing its advantages over introspection and giving general facts about the size of general-language corpora – a useful reminder for readers who would not be familiar with the subject. Then she traces the history of the contribution of corpus linguistics to general learners' dictionaries, explaining that the use of corpora in *specialized* lexicography is not as systematic but is (slowly) taking up. Relying on a corpus helps general lexicographers in several areas: information about frequency can help to construct the headword list, compile the definitions and order the senses; it can also provide authentic examples – something of great help to learners – and help to identify grammatical and phraseological patterns. What seems more original in her explanation is the resort to learner corpora. The very last section of this article, about the potential of corpora for SLDs, is a key issue that, in our view, should have been the main focus of the chapter. Bowker demonstrates that even though the availability of specialized corpora is not so much of an issue any more, not many dictionaries seem to rely on them yet. According to her, all the above-mentioned advantages of resorting to corpora for general learners' dictionaries can be applied to specialized ones, all the more so as the focus of the latter has recently shifted from text reception to text production by LSP learners. She seems to be in favor of a hybrid approach, but applied in reverse: new corpus-based specialized dictionaries could include both specialized terms and general words frequently used within the field. She recommends that SLDs rely both on corpora recording native speaker usage and learner

corpora. One last promising suggestion is to use spoken-language corpora, a road yet to be trodden.

Part III

Finally, the last part deals with the challenges ahead for pedagogical specialized dictionaries. In Chapter 10, Zhang Yihua and Guo Qiping (from Guangdong University of Foreign Studies, China) give the reader a very interesting insight into Chinese pedagogical specialized lexicography. They start by demonstrating that although China has produced many *general* specialized dictionaries (GSDs), it still lacks SLDs. Most existing dictionaries are not appropriate because they are intended only for professionals (either field experts or translators), and do not record enough linguistic information. This is backed up with the results of a survey conducted among 128 undergraduate students who attend specialized courses taught in English: only a third use bilingual English-Chinese specialized dictionaries, because they find the existing dictionaries unhelpful. The authors infer from their findings that users are demanding a new type of dictionary. The growing bilingual context of education in China, from pre-school to higher education, makes this country a "huge potential market" for SLDs, with many textbooks written in English. Hence the need for a theoretical framework for a new type of dictionary. The authors first show how SLDs differ from GSDs in terms of users, purposes, linguistic, functional and structural features, then how they differ from general learners' dictionaries. Next, they examine the functions of English-Chinese SLDs, which are both communicative and cognitive. They insist that both active and passive vocabulary be included in the dictionary, together with a sufficient amount of specialty knowledge. The structural features of the ideal SLD are also under scrutiny: dictionary design should take megastructure, microstructure, distribution and access structure into consideration. The sub-section dealing with the inclusion of lexical relationships is very complex, and Figure 4 in particular would have required further explanations. Section 5 discusses definitions; the authors argue that they should be 'multidimensional' (based on cognitive domains, and with a focus on the foreign tongue), 'holistic' (situated within a larger frame, with a mention of hypernyms, differentiae, co-hyponyms, etc) and 'pertinent' (in accordance with specific academic fields). They give a few much needed examples to illustrate their point, but the source of these examples is not clearly specified. Finally, the last section deals with the tricky issue of the translation of culture-bound items. The authors argue that 'calque' – be it semantic, morphological, phonological or else – is a more effective approach than the usual free translation strategy. Although this section is very interesting from a contrastive point of view, its relevance regarding lexicography is not obvious, and it could have been shortened or more directly connected to lexicographical issues.

The very last chapter was written by the editor of the book, Fuertes-Olivera, and truly deals with "Lexicography for The Third Millenium" as it focuses on Internet dictionaries. After a reminder about the functional approach, which is the theoretical framework used in his paper, the author tries to refine De Schryver's typologies of electronic dictionaries (2003) by adding three more criteria: (i) the identity of the compiler, (ii) the type of access to the dictionary – free vs. restricted, and (iii) the intended user of the dictionary. This leads him to highlight the category of institutional Internet reference works, which can be further sub-divided into restricted institutional Internet reference works and free ones. The former correspond to electronic versions of 'traditional' dictionaries, and are thus of lesser interest than the latter, which are the focus of the rest of the article. Those dictionaries, compiled by "amateur lexicographers" working in identifiable institutions, have rarely been studied, which makes the contribution really valuable. Based on the analysis of terms starting with the letter E in the dictionaries of finance retrieved by the Yourdictionary.com portal, the author has identified three sub-types: (i) glossaries compiled by consultancies or private companies, (ii) reference works by national or international organizations, which, more often than not, are electronic versions of previous paper reference works, and (iii) reference works compiled by amateur trained lexicographers working in the language industry. Unsurprisingly enough, it is the last category that fares the best as to users' communicative needs. The lexicographic quality of the first two is indeed rather poor. The last part of this chapter consists of recommendations regarding the construction of future free institutional Internet reference works. The author lists six essential lexicographic requirements: the lemma selected should be relevant; the treatment of meaning should include contextualization and be aimed at semi-experts more than laymen; semantic relationships should be signalled; grammatical information should be separately included; the access structure should be user-friendly

and, information about the subjet field should be provided. An additional set of recommendations is Internet-specific and reinforces those already made by Almind (2005). They include resorting to more user-friendly search engines and proper hypertextuality, and to regular updating. More importantly, the author advocates integrating the dictionaries in "teaching packages". Although the validity and desirability of all those recommendations cannot be questioned, they seem hard to put into practice as the compilers of such dictionaries are said to be amateurs, and not professional lexicographers.

3. Conclusion

In the first section, we mentioned that one of the things we expected to find when reading the work under review was discussions about the concept of the learner. The book really was up to our expectations in that respect. As far as theoretical considerations are concerned, we can say that it exceeded all expectations, since approximately two thirds are dedicated to theoretical aspects. However, the practical applications of such bountiful theory are not sufficiently developed in the book in our opinion.

If we set aside our own expectations, is this volume true to what it claims to be in the preface and in the introduction? According to the preface (p.2), it has three objectives:

(i) "defend[ing] a function-based transformative approach centred on the dictionary and the users, investigating which lexicographic theories and principles are best suited for learners enrolled on LSP courses and/or Translation degrees": the first sub-objective of the first objective is more than fulfilled, since the FT seems to be the only theory outlined here, which is bound to leave little room for a discussion about which lexicographic theory is best suited for learners. The book is slightly misleading in that respect as it might give the (false) impression that very few other scholars have studied the issue of user needs;

(ii) "honour[ing] Enrique Alcaraz's pioneering visions and daily activities as a teacher, translator of specialized texts, and lexicographer": although the book is of great relevance for teachers, translators and lexicographers, it is not directly linked to Enrique Alcaraz's ideas, something which could have been the focus of a general conclusion;

(iii) "open[ing] up new lines of research in terms of the construction of pedagogically-oriented specialized dictionaries": this is probably where the book proved to be more successful, and in that respect it can be said to honour the memory of Professor Alcaraz.

However, a more practical implementation of many of the theoretical lines of research would be welcome.

Finally, it is said in the introduction (p.24) that the book defends three main ideas – that "there is a need and a market for specialised dictionaries for learners", "most of the existing specialised dictionaries are not adequate for learners", and "we need a sound theoretical framework for coping with known and unknown challenges in the realm of pedagogical specialized lexicography". From our point of view, the first two can be considered more as basic premises underlying the book than as topics actually discussed in the papers; it is only the chapter on Chinese lexicography that explictly shows there is a market for this type of dictionaries, and the limitations of existing dictionaries are not systematically pointed out. The third idea does run throughout the volume, but is limited to the presentation of a single theoretical framework, which might be seen as too restrictive.

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Gilles-Maurice de Schryver (ed.). *A Way with Words: Recent Advances in Lexical Theory and Analysis. A Festschrift for Patrick Hanks*

This *Festschrift for Patrick Hanks*, like Hanks's own career, covers a period of extraordinary interest and technological change for the practice of lexicography. As Yorick Wilks, looking back to the early 1980s, points out, "Computational search within large corpora … was simply an aspiration." Dictionaries were compiled in hard copy (in 1978, only storage in fireproof cabinets saved fourteen years' worth work for the *Historical Thesaurus of the Oxford English Dictionary*, when the Glasgow premises were gutted by fire). Real-language evidence was similarly likely to exist only in the form of citation-based handwritten files. By 2010, dictionaries and reference had moved online, and the existence of significant corpora is now taken as a norm. *A Way with Words* charts some of the paths between the two extremes in the thirty years covered by the book. Understandably for a festschrift, papers come from those (many of them long-term friends, colleagues, and associates) who have found Hanks's work particularly fruitful as representing the contribution of a key mover and shaker in the field.

Introduction
In "Getting to the Bottom of How Language Works", Gilles-Maurice de Schryver sets the scene by outlining Hanks's career and significant publications (for example, 'Word Association Norms, Mutual Information, and Lexicography', co-authored with Ken Church in 1989). The three divisions of the book, theoretical, computational, and lexicographic, reflect the main areas of that career. This explicit connection provides a linking thread between the papers—as good a way as any of achieving a level of homogeneity for the book. A few of the links