BOOK REVIEWS:

Wüster and (Applied) Linguistics Research

Terminology und Wissensordnung. Ausgewählte Schriften aus dem Gesamtwerk von Eugen Wüster.

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TermNet Publisher, Vienna, Austria, 2001, vi+432pp. (termnetpublisher@termnet.at) ISBN 3-901010-27-0

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There has been and there continues to be so much controversy around Wüster that it is hardly possible to avoid polemics in an account of his writings. This book of 432 pages is a collection of Eugen Wüster's writings (some of which are hardly known). It contains 26 pieces (published journal articles, conference papers, etc.) which, for reasons of convenience, will be referred to here as chapters. The last chapter is a tribute to Wüster by the eminent linguist, Leo Weisgerber. Two of the chapters are in English, while the remaining twenty-four are in German. The chapters are divided into 7 sections: theoretical works, terminography, standardization, terminology and other disciplines, terminology training, development and importance of terminology, and contributions on Wüster.

Taken together with other attempts at giving an overview of Wüster's work (e.g. Antia, in press), this book is remarkable because it leaves the reader (and researcher in terminology) with a feeling of humility and emptiness — expressible as 'whathave-I-really-achieved?' or 'have-I-not-been-rehashing-Wüster?' It does not appear to matter what category the reader falls into in Myking's 3-group classification of views on the so-called Wüster school of terminology: (a) moderate and loyal,

(b) radical subversive, and (c) radical and loyal. I take the liberty to quote Myking *in extenso*:

The position (a) is aiming at (a rapprochement between) terminology and linguistics, even integration, without abandoning the established methodological and theoretical tenets - such as, in particular, the onomasiological approach to conceptology. [...]. The polarity of Terminology and Linguistics, a significant feature of earlier writings in terminology, should, consequently, be diminished [...]. The position (b), on the other hand, seems to reject traditional terminology completely, as documented above. [...]. It is an important consequence of this conception that the polarity between traditional terminology and current linguistics is maintained and even sharpened. [...]. (The) main feature of position (c) seems to be a linguistic inspiration quite similar to (b) but combined with an explicit intention of analysing Wüster on the background of his historical context - hence the label "loyal". According to Bertha Toft, the wüsterian tradition needs completion and adjustment by cognitive and functional approaches instead of complete overthrowing. [...].

In this review article, it will be shown how a knowledge of Wüster's work serves as an indispensable framework for epistemological discussions (origin and evolution of ideas, assessment of current research achievements, etc.) in the field of terminology studies. This will be done in two ways corresponding, respectively, to the two major parts of this article. The first part of the article will deal with what is loosely called 'status issues'. It will show Wüster as a pioneer of branches of linguistics as well as discuss Wüster's attitude to linguistics. The second part of the article will show the breath of Wüster's preoccupations, against the background of topical lines of LSP/terminology research.

Status issues: Wüster in and on linguistics

It is common to see Wüster referred to exclusively as a/the pioneer, at times as father, of modern terminology. In this description, two senses of terminology appear to be activated: body of theoretical knowledge, and methodology for creating specialized lexical resources. A careful reading of several of the chapters of this book suggests that, perhaps in the eagerness to assert some measure of disciplinary identity by enlisting heroes, scholars have done Wüster the disservice of confining him to terminology. A number of chapters present Wüster as: (a) an early contributor to modern linguistics thought, particularly semantics (see, for instance, chapter 4); and (b) a pioneer of LSP who also tried to claim a place within linguistics for LSP research (see, for instance, chapters 2, 25, 26).

Semantics has become an established branch of general linguistics today, contrary to the situation half a century ago when the subject was of no interest to linguists. The eminent British linguist, Randolph Quirk, in his foreword to Halliday and Hassan's *Cohesion in English*, writes that:

But as with semantics – another and closely area which linguists have hesitated to enter, often justifying their dissociation on closely-argued theoretical grounds – it was not unreasonably held that relations 'beyond the sentence' involved a complex interplay of linguistics with other concerns ... for which the theoretical foundations and framework were too shaky to support ambitious model building. (Quirk 1976: v).

As late as the 1950s, linguists were still trying to make sense of meaning. For instance, the theme of the plenary session of the International Congress of Linguists in 1957 (Oslo, Norway) was: Is meaning structured? Earlier, in 1953, a book by Leisi based on a postdoctoral thesis (Univ. of Zürich) claimed it was the first to attempt a synchronic semantic analysis consisting of a semantic classification of words (chapter 4). That was the air of the times.

Enter Wüster. At the Oslo linguistics conference, Wüster argued that linguistics may only be able to adequately deal with the issue of the structure of meaning by engaging with logic, which studies concepts (which under conditions can be equated with meaning), and shows how concepts can be related to form a structure (chapter 4). Meaning structure can be more or less explicit, as would be suggested by an analysis of relations inherent in components of compound words. Structure can also be implicit, as can be revealed by: (a) a study of a word's characteristics that is intended to account for various phenomena of polysemy (metaphor, metonymy, etc.) – the idea being that polysemous words form a network structure; and (b) a study intended to assign a word a position in the conceptual system of a given language. In the account he gives of these three areas of meaning structure, Wüster repeatedly points to the weaknesses of the dominant linguistic research paradigm.

It is instructive that in this extensive discussion Wüster was not just doing his terminology and only incidentally helping the young area of synchronic semantics come to terms with meaning structure. There are several clues that he saw himself contributing directly to semantics. He, for instance, strenuously rejects the suggestion that his account was applicable only to LSP. He does this by, among others, giving some insight into his preceding 4-year work on a systematic comparison of the meaning of the most frequent words in several Indo-Germanic languages.

An epistemic impact assessment of Wüster must also acknowledge his pioneering work, alongside Weisgerber, Kandler, Deeter and Sperber in the German language space, in providing the groundwork for, and in founding Applied Linguistics. Applied Linguistics is not understood in the Anglo-American acceptation of language teaching and learning, but in the sense of a study of language in its relationship to Man's activities in all spheres of life. Now, some two decades after the founding, in 1909, of the German linguistics journal 'Wörter und Sachen' (words and objects), the need had become felt, according to Weisgerber's tribute

(chapter 26), to rethink research on the reciprocal relationship between language and material culture. The work of the preceding two decades had been restricted because the focus had been mainly on etymology, that is, the reference to objects of a non-contemporary material culture to explain word meanings; as a result, beyond the occasional identification of the motivation for object names, there was very little substantial insight into the relationship between objects and words. This is hardly surprising when it is known that, because of the unique requirements of proficiency in subject fields and in linguistic analysis, LSP research was for long beyond the competence reach of linguists. Weisgerber speaks of linguists having missed the opportunity of being LSP pioneers.

That, according to Weisgerber, was the state of research in language and objects until Wüster's 1931 book appeared. In it, Wüster charts a new course of synchronic and multifaceted research into the reciprocal relation of language and material culture. Weisgerber might have illustrated this point with the Wüsterian dictum, so well known in object standardization circles: standardization of objects is not possible without language standardization, and vice versa (cf. chapter 16). What Weisgerber sees as Wüster's pioneering and insightful practical work on the relationship between word and object has a very theoretical side which we find, for instance, in the well-known piece 'Das Worten der Welt' (The wording of the world) – incidentally dedicated to Weisgerber (chapter 3). Here, Wüster gives an account of the four-some: ontology, epistemology, designation and discursification.

In summing up this section, attention may be drawn to a claim which, if correct, would show just how pioneering a figure Wüster was in German Applied Linguistics – easily one of the most sophisticated. In chapter 7, Wüster writes that he was the first to use the term 'angewandte Sprachwissenschaft' (Applied Linguistics) in his 1931 book!

The third status issue (after synchronic semantics and Applied Linguistics) which this book addresses is that of Wüster's attitude to linguistics, and his view of the relationship between terminology and linguistics. It is at this point that the perceptive reader begins to question some of the putative polarity between Wüster/terminology and linguistics. In a number of articles, some of which are included in this book (e.g. chapter 7), Wüster presents differences between terminology/LSP and linguistics. In showing (in chapter 2), even against the backdrop of these differences, how several terminological activities are operations on meaning – international standardization=comparison and delimitation of meanings; definition= delimitation of a concept's meaning from the meaning of related concepts; conceptual representation of terms = ordering of concepts according to meaning; etc. – Wüster seems to be claiming a place within linguistics for LSP/terminology, and to be implying something of the relationship between terminology and linguistics that is different from what is normally imputed to him.

Rather than imply polarity, Wüster appears to be indicating what is and what is not worthwhile for linguistics to study in LSP/terminology, given: (a) the nature of

specialized subject fields, (b) what their discursification shares with general language, and (c) the intellectual climate at the time. Diachrony had been studied *ad nauseam*, and as such linguistics could concentrate on other issues. A phonetics of LSP is hard to justify. The general language framework for inflectional morphology and syntax is adequate to deal with corresponding phenomena in LSP/terminology (chapter 7). Because language evaluation for purposes of concept harmonization and term standardization are not issues in general language, linguistics would require retooling if it is to cope. Now, evidence that Wüster was thinking of the kind of linguistics needed to cope with LSP/terminology can be found in chapter 4 (see the discussion on, among others, 'Internationale Sprachbetrachtung' – p. 140; 'Die Wortbildung in der Sprachwissenschaft' – p. 164f.). This chapter 4 is, paradoxically, the piece which Wüster loyalists and subverts alike use to make the same point on the differences between terminology and linguistics, even though they disagree on what needs to be done! (See Myking's classification).

The following observations give the lie to claims or suggestions that, being an Engineer, Wüster knew very little about linguistics: more than half of the articles in this book were published under linguistic auspices (journals, conference proceedings, etc.); Wüster was very familiar with the work of leading linguists of his time (as attested to by Weisgerber); he saw a model terminological dictionary like Schlomann's and work on term standardization as applications of structural semantics; the publication of his 1931 book by the Association of German Engineers could easily have been scuttled by an assessor who found the book too steeped in linguistics. Contrary, therefore, to what is generally believed, Wüster had a positive attitude towards linguistics.

However, the fact of Wüster being at home with linguistics did not mean that he had to cease to be an engineer or a scientist. The possibility of scientists and linguists having different starting points in their common work on LSP, as hinted at in Antia (2000:88), does not appear to be sufficiently appreciated in the literature. It is worth recalling that 'although science uses language, it is concerned with the designated things themselves in that it analyzes these things and makes a statement about them' (Coserieu, quoted by Baldinger, 1980). Baldinger writes further that the 'only language which tries to follow objective borders is scientific language.' This contrasts with the goal of structural semantics as stated by Kleiber (1990): 'the European structuralist movement precisely sought to free semes of all association with the referent in order to emphasise their operational or functional side, which is linguistic and nothing else' (my translation from the French). So, while applying structuralism, the dominant paradigm at the time, Wüster must, in the light of the foregoing, have had to perform strange balancing acts – if not in his own mind, certainly in the perception of observers.

Besides its surprising answer to the above status questions, this book is remarkable in another sense. Wüster comes across as having worked on or broached a number of the topics in the research on terminology and LSP of the last ten years.

Sometimes, the approach of contemporary research is so strikingly similar to Wüster's that one has to conclude that, if this collection of papers had been accessible, the sense of achievement of current work (as an analysis of premises suggests), or the reception accorded it, would have been a lot more measured. See Antia (in press) on what is happening in Terminology: paradigm articulation or paradigm shift? That discussion suggested that labelling as paradigm articulation a line of research does not diminish the quality of contribution.

The study of the following topics has been hailed as important advances and novel in LSP/terminology, or as radical departures from traditional positions:

- (a) visual-graphical and other non-verbal resources in specialized texts, including terminologies (dictionaries, databanks, etc.);
- (b) difference between terms at system level and at text level;
- (c) diversity of interests that may be associated with terms (as units of specialized designation) in a given field;
- (d) morpho-conceptual analyses of terms;
- (e) social auspices or nexus of terminology (standardization, synonymy, etc.) and the importance of diachrony.

With respect to (a), Laurén, Picht, Galinski, Pilke – to mention only a few names from the terminology end of the LSP research spectrum – have in recent papers been pointing to the expressive limitations of verbal texts, or to the complementary nature of the verbal and the non-verbal in enhancing the expressiveness of specialized texts. Pilke's interest here is in the use of graphics for representing 'dynamic' (as opposed to 'static') concepts in terminological glossaries. Now, it is interesting to see how far ahead Wüster was. For him the question was not one of desirability of non-verbal supports, but that of 'debugging' dictionary illustrations. In chapter 11 (an extract from Wüster's 1968 *Dictionary of Machine Tools*), the reader finds very useful reflections on the challenges of graphically representing degrees of abstraction (genre, species) in dictionaries. How do you, for example, illustrate a generic concept (thus, an abstraction) in a dictionary that also enters species of that concept? *Think about it*!

It is concerns such as the foregoing that one finds in chapter 8 on notations for indicating directions (e.g. broader to narrower concept, coordination, etc.) in the concept records of a dictionary, etc.

With respect to (b) on the differences between terms in system description and terms as text, one might cite research by Gerzymisch-Arbogast, Rogers and Antia, which present either a typology of system-text variations of concept/term or the dynamics of textualization that account for variations. Interestingly, chapter 6 of the book has a section titled 'Wesensunterschied zwischen Systemarbeit und Terminologieverwendung' which discusses precisely the differences in the nature of terms seen as components of a system and as discourse realizations of the system. Wüster describes the difference between these two conceptualizations as

fundamental ('grundlegender Wesensunterschied'). Mindful of Wüster's claim in his allusion to his 4-part word model, developed in another piece, that no two tokens or realizations of a term are identical ('keiner davon ist dem anderen vollständig gleich) – whether formally or content-wise – it becomes clear that Wüster was conscious of the need for a functional account of terms, and that he squeezed whatever functionalism he could get from the dominant, Saussurean account of language. Wüster is here clearly switching hats, from that of a scientist doing LSP to that of a linguist co-worker.

With respect to (c) on the diversity of interests in the 'term' as object of terminological research, one might cite, among others, the work by Cabré and Estopà presented at the 1999 edition of the conference on Terminology and Knowledge Engineering. (The work is not part of the pre-published Conference volume). The presentation compares units of designation in a given field as evident in the work of various interested parties (professionals in the field, documentalists, translators, etc.), and shows that there are pragmatic dimensions to the conceptualization of objects of terminological research. In chapter 6 of the Wüster collection, published in 1969, Wüster identifies three approaches ('Sprachzugang') to work on terminology: the approach of those who look at terms from the outside (perspective of documentalists); the approach of users of terms in texts (writers, translators, etc.); and finally, the approach of subject insiders interested in researching or representing the system of concepts and terms of a field (disciplinary terminology commissions, etc.). See also chapter 21.

With respect to (d) on the relationship between morphemic structures and concept structures, one might cite Weissenhofer, who develops a morpho-conceptual classification of compounds used in English baseball terminology. It is interesting to see or learn from the Wüster collection just how further back (than the 1980s sources cited by Weissenhofer) this type of research goes. Already in Wüster's 1931 book, we see a concern to account for how compound terms reflect the logical relations (determination, conjunction, integration, etc.) between the concepts designated by these compounds. Chapter 9 of the Wüster collection titled 'Bildung zusammengesetz Hauptwörter in Naturwissenschaft und Technik' is an account of key compound words in the Natural sciences and in Engineering. Dimensions employed in classifying these compounds include entity category (e.g. object, size, unit of measurement) and logical relation type (determination, conjunction, etc). See also the section of chapter 7 treating logical relations in word formation. In effect, therefore, Weissenhofer's work on classifying the relations between concepts in compounds - according to agent, purpose, origin, etc. - has a rather long pedigree in Wüsterian thought.

With respect to (e), that is, work on the functionalism of synonymy, the societal auspices of term use, and on the importance of diachrony, one may mention Temmerman. The collection under analysis makes it obvious that Wüster was well aware of these issues. Consider, for example, the following extract from chapter 11 dealing with the 1968 *Dictionary of Machine Tools*:

In every language there are many concepts for which several **synonyms** exist. In such cases the question of which synonyms ought to be admitted, and which not, has been settled on the principle of **including all those in current usage**, whether they are standardized terms or not. [...].

There is one last type of synonym, in which two or more terms stand for exactly the same concept but cannot nevertheless be used interchangeably; the reason being that the different terms are used by persons in **different social groups**. Concept 49, for instance, which is called *feeler gauge* in English and *thickness gage* in American, is called *Fühllehre* or *Spaltlehre* by German engineers, but *Spion* by most German artisans. [p.228].

Before commenting on this quotation, let us recall the danger Wüster believed an essentially etymological work posed in terminology (see chapter 2). Let us also recall from the Weisgerber tribute (chapter 26) just how dominant diachronic studies of words had been, yielding (for the study of language and material culture) little more than an occasional insight into the motivation for a given designation. Now, if Wüster had turned a blind eye to these reservations, and added a line or two on etymology to the above quotation, the passage might have read very much like a passage from Temmerman's book discussing the functionality of the (near-) synonyms: *Southern blotting*, (*Southern*) transfer and (*Southern*) hybridization.

Now, being aware of the functionality of synonyms and of the legitimacy of its study is not to ignore just how high the stakes of dysfunctional communication (arising from synonymy) can be, particularly in safety-critical environments. It is no doubt a reflection of how Wüster viewed his social or ecological responsibility that he considered the social impact of standardization greater than the impact of etymological studies.

The foregoing also seems to provide the perspective for some of the chapters on standardization (e.g. 12, 13). As if to correct views or possible impressions of there being a contradiction between practice and theory in terminology, particularly in respect of synonymy, these and other chapters remind us that documentation (e.g. in dictionaries) of diversity in term usage (the so-called 'ist-Norm') is indispensable for standardization or prescription (the so-called 'soll-Norm').

Two final issues may be mentioned on the relationship between this book and current preoccupations. It is not infrequently suggested today that for a long time there was only one man, Wüster, running the terminology empire, responsible for virtually all the drafts from standardization bodies, holding everyone in the empire in his sway. This type of criticism, incidentally, was made as far back as 1965. Wüster strenuously denies this in chapter 5 of the book, where he also replies point by point to 20 other specific criticisms. Admittedly, on the issue of holding everyone in the empire in his sway, this is a case of Wüster's word against that of his critics. At any rate, Wüster sets out in great detail, in this chapter and in several

others (10, 14, 15, 17, 22), the inner workings of standardization bodies and the process of developing a dictionary or a standard on terminological principles, etc. The reader is supposed to infer the difficulty of a single individual having his way within national and international standardization bodies.

There is also the issue of training in terminology. One might mention here contributions by, among others, Wright, Budin, Sandrini, Schmitz, Nuopponen & Järvi, Plested and Sandrini, in vol. 8 (1997) of the journal, *Terminology Science & Research*. It is quite interesting to see how chapter 21 of the Wüster collection provides something of a broad framework for understanding these contributions. This chapter sees Wüster answering questions on who needs terminology training, the orientation (language or subject-field) of the needs, the level of terminological knowledge required by each group, the integration of terminology into university-level programmes, etc.

As stated at the beginning, this book is quite remarkable in the sense of the relative emptiness it imposes on the reader, irrespective of his or her status as a Wüster loyalist or subvert of whatever hue. The compilers of this volume, Heribert Picht and Klaus-Dirk Schmitz, are leading terminology scholars who have been following trends in the field. In putting together the papers in this book, it was their aim to provide a context for observing how Wüster's ideas developed, and for evaluating these ideas. It was also their aim to make available otherwise inaccessible materials, and thereby achieve two things: demonstrate how broad the spectrum of Wüster's concerns were, and afford contemporary researchers the opportunity of assessing their work. On both accounts, Heribert Picht and Klaus-Dirk Schmitz have been very successful. To ventilate the second point, it is striking to notice how, in criticisms of Wüsterian terminology, Wüster is scantily cited. With this book allowing Wüster to severally articulate his ideas, some of the excuse for reading him through Felber, for instance, is gone; in other words, the groundwork for engaging directly with Wüster has been done. Engaging directly with Wüster is of course about finding the good, the bad and the ugly in his writings. This book, particularly in an English translation, will raise the level of informed discourse on Wüster's place in language research in general, and in terminology in particular.

Selected references

- Antia, B.E. (in press). 'Metadiscourse in terminology: thesis, antithesis, synthesis.' *Terminology Science & Research* (special issue on terminology at a crossroads).
- Antia, B.E. (2002). 'II termine: contesto definitorio e contesto d'uso.' In: M. Magris, M.T. Musacchio, L. Rega & F. Scarpa (eds) *Manuale di terminologia. Aspetti teorici, metodologici e applicativi*. Milan: Hoepli, 99-114.
- Antia, B.E. (2000) Terminology and Language Planning: an alternative framework of discourse and practice. Amsterdam/Philadelphia: John Benjamins.
- Baldinger, K. 1980. Semantic Theory: Towards a Modern Semantics [Transl. W.C. Brown; ed. R. Wright] Oxford: Basil Blackwell.
- Cabre, M.T. & R. Estopà (1999). Presentation at TKE '99 on units of specialized meaning as employed by different categories of professionals working in a given field.

- Galinski, C. & H. Picht (1996). 'Graphic and Other Semiotic Forms of Knowledge Representation in Terminology Management.' In: S.E. Wright & G. Budin (compilers) *Handbook of Terminology Management*. Vol. 1. Amsterdam/Philadelphia: John Benjamins, 42-61.
- Gerzymisch-Arbogast, H. (1996). Termini im Kontext. Verfahren zur Erschließung und Übersetzung der textspezifischen Bedeutung von fachlichen Ausdrücken. Tübingen: Gunter Narr (FFF, vol 31).
- Kleiber, G. (1990). La sémantique du prototype. Paris: Presses universitaires de France.
- Laurén, C., J. Myking, & H. Picht (1998). *Terminologie unter der Lupe* [with additional contributions by Anita Nuopponen & Nina Pilke]. TermNet: Vienna.
- Myking, J. (in press). 'Against prescriptivism? The socio-critical challenge to terminology.' *Terminology Science & Research* (special issue on terminology at a crossroads).
- Pilke, N. (2001). 'The Concept and the Object in Terminology Science.' *Terminology Science & Research* (special issue on terminology at a crossroads).
- Quirk, R. (1976). 'Preface' to M.A.K Halliday & R. Hassan *Cohesion in English*. London, Longman.
- Rogers, M. (1999). 'Translating Terms in Text: Holding on to Some Slippery Customers.' In: G. Anderman and M. Rogers (eds.) *Word, Text, Translation. Liber Amicorium for Peter Newmark*. Clevedon: Multilingual Matters, 104-116.
- Temmerman (2000). Towards New Ways of Terminology Description. The sociocognitive approach. Amsterdam/Philadelphia: John Benjamins.
- Weissenhofer, P. (1995). Conceptology in Terminology Theory, Semantics and Word Formation. Vienna: TermNet
