Igor Burkhanov. Linguistic Foundations of Ideography: Semantic Analysis and Ideographic Dictionaries. 1999, 388pp. ISBN 8387288985. Rzeszów: Wydawnictwo Wyższej Szkoły Pedagogicznej. Price: 16 PLN.

In his book, Igor Burkhanov assumes that cognitive semantics, as developed mainly in the United States of America from about 1980, is a linguistic innovation which lends itself to a thorough renovation of pedagogical dictionaries. In order to show this convincingly, he discusses lexicography as an applied discipline of linguistics with the study of meaning at its centre. The various types of ideographical (onomasiological) dictionaries extant are presented and the development of semantics is unravelled from the field theory of the early 20th century to the present. After a general sketch of the learner's ideographical dictionary, the possible contribution of cognitive semantics is shown in a number of sample entries. The book is evaluated as being highly informative and equally highly honest, because the many shortcomings and deficiencies of pedagogical metalexicography are pointed out. A careful weighing of its statements gives occasion for some critical ideas about the relationship between linguistics and philology, the terminology and typology of ideographical dictionaries, and the feasibility of the proposed new dictionaries for didactic purposes.

In the language-related sciences, abstract innovations in theory often stimulate concrete innovations in related fields of practice. New ideas in syntax, for example, may lead to new descriptive grammars and eventually to new teaching methods. New ideas in semantics may lead to new ways of meaning determination (lexicology) and eventually to new dictionaries. Such projections from theory to practice are more likely to occur the more radical the abstract innovations are, i.e. the more they introduce a shift of paradigm. Igor Burkhanov assumes that *cognitive semantics* is an innovation of this sort. He regards its principles of the constitution of word meanings as seminal for lexicology and lexicography because they deviate from the older clear-cut and binary demarcations of structural semantics. In particular, the concept of the prototype is understood by him to have the potential for streamlining a rather neglected old (and therefore in its revival now new) dictionary type as such and the methods of its entry structure. He calls it by the name ideography/ideographical.

It is to the credit of the author that he does not jump hastily from cognitive semantics to lexicographical conclusions. Rather, he reflects painstakingly on the general presuppositions of lexicography as an academic discipline and the role of the linguistic description of the lexicon in it (chapter 1), then moves on to discussing the scope of ideography (chapter 2) plus the types of relevant dictionaries (chapter 3), and finally unravels the developments in linguistic semantics and their significance for the dictionaries in question (chapter 4). The general foundations thus being laid, he demarcates the design of a learner's ideographical dictionary of the general vocabulary (chapter 5), i.e. the type of dictionary he has in mind for some innovative proposals, and finally applies everything said and discussed so far to 'problems and perspectives' as well as to 'results and their representation' (chapter 6). The reader is, thus, guided from an abstract positioning of lexicography as an applied linguistic discipline to a representative sample of dictionary entries in a linguistically new vein. All the reflections that demand to be present in a lexicographer's mind when at work are laid out critically, and this is done in a clear and intelligible sequence of scientific thought.

Generally speaking, applied disciplines (for example in mathematics, theology, linguistics, etc.) are subject to the idea that the theory behind them can provide an adequate solution to problems which originate in practice, but all adherents of this idea find it difficult to admit that these problems of practice are of a genuine nature which is different from that which a theory can meet. It would therefore be advisable to approach these difficult 'applications' at least in an interdisciplinary way. Several disciplines in co-perspective will certainly be successful where one must fail. This does not preclude the fact that, occasionally, there is one discipline which is more centrally involved in the approach than others. Such is, for instance, the case with linguistics and the solution to lexicographical problems. Therefore, it is legitimate to discuss the linguistic foundations of lexicography (and inside lexicography of ideography) as the author does. Notwithstanding this fact, lexicography should not be regarded as theoretical linguistics in application but as lexicography in its own right. There are many disciplines of this sort which, though looking for support elsewhere, have their own constitution. (Think of medicine, mathematics, and others.) Therefore, I fully agree with the author, when he informs his readers about these queries over demarcation (chapter 1), that lexicography is a practice-oriented (i.e. applied) discipline 'of not only a linguistic but also a historical and philological nature' (p. 22). Philology in its diachronic perspective is indeed rather interdisciplinary and quite different from today's methods of system and form driven linguistics. I only regret that the book as a whole does not make wider use of this insight, that 'the ways of life, traditions, common beliefs, institutions and collective activities' (p. 23), which are so important for understanding dictionaries, are not mentioned further. (Of course, I realise that this would have changed the character and the volume of the book to a larger degree than the author was obviously prepared to do.) But lexicographers must themselves become aware of the fact, and inform their readers accordingly, that they are dealing with a highly culture-sensitive section of linguistic activities (e.g. Green 1996, Hüllen 1999, Haß-Zumkehr 2001). If this is so, they must maintain more clearly than is usually done that lexicography is not only the discipline of compiling dictionaries (process-oriented) and of analyzing them (product-oriented). It is also the discipline dealing with the linguistic needs of people (in a given culture and at a certain time) and of the use they make of dictionaries in order to answer them. This pertains to the dictionaries of their own language as well as to those of foreign ones.

Furthermore, I agree with the author that, as a consequence of this, a typology of dictionaries, as far as meaning determination is concerned, must not be taken solely from the methods of linguistics. An imposing overview of contemporary semantics and lexicology, in their own right and in relation to pragmatics and stylistics, is given. Again the cognitive approach earns the praise of the lexicographer, because of its culturally relevant information, including the important difference between common sense and expert knowledge (p. 48). Generally speaking, functional rather than structural divisions are explained as being pertinent. In spite of the wealth of semantic concepts, information on the actual use of lexemes is not sufficiently provided. But this is what dictionaries need. So the results of this *tour d'horizon* are actually rather disappointing (e.g. p. 68). Only the expectation that the new developments will help, emerges. This is why the question now becomes urgent for the reader of what the information is which a dictionary has to provide for its users and how this information can be catered for by linguistics.

This answer is (at least partly) given in the discussion of the typological features of an ideographical dictionary (chapter 2). In my view, it is regrettable in general that there are so many terms for naming those dictionaries whose entries are not arranged alphabetically. Although some reasons are given for the differences between dictionaries called ideological, ideographical, analogical, semantic, conceptual, thematic, topical, or onomasiological, and for names like thesaurus and The Wordtree, the impression of an embarrassing terminological abundance (of course not of the author's making) prevails. I myself prefer the term *onomasiological* as a synonym for topical, because it was used and satisfactorily discussed in opposition to semasiological in a long drawn-out debate in Germany on the wissenschaftliches Wörterbuch towards the end of the 19th century and later (Baldinger 1960). For philosophical reasons (Hüllen 1999), I describe the onomasiological dictionary before (roughly) 1700 as being of the speculative, the one after this date as being of the mental type. The watershed is the work of John Locke with its new concept of the meaning of words as signs for simple and complex ideas (Hüllen 2000). If we leave dictionaries of languages with other than alphabetical letter systems aside (because they require special consideration anyway) and furthermore neglect a possible phonological entry arrangement in a dictionary (because to my knowledge such dictionaries do not exist) and also the reverse dictionary (because of its limited, purely academic, purpose), all the names used and mentioned above mean the same: A dictionary whose entries are not arranged alphabetically from left to right and from top to bottom but according to meaning. One can call this the dichotomy between a formal and non-formal arrangement in the macrostructure.

This purely superficial property is in fact indicative of two possible ways of processing language as they already appear in language learning. Children either point to X (e.g. a toy) asking 'What's that?' (onomasiological), or they hear a word /toy/ and ask 'What does it mean?' (semasiological). The difference between the two types of dictionaries therefore pertains to mental processing and the authors' intention of meeting it adequately. This may be more important than the fact of non-/alphabetization. The two methods of processing are perfectly common to every language user. They have their ultimate

motivation, of course, in the two sides of the linguistic sign (p. 90). They constitute the difference between, for example, *extracting* meanings *from* signs by reading and listening, and *expressing* meanings *in* signs by writing and speaking. The two ways of organizing dictionaries are meant to serve them in daily practice.

Igor Burkhanov rightly observes that the compromises between the extremes of the dichotomy are perhaps the, for metalexicography, more important phenomena than the 'pure' cases (provided they exist at all, see below). Analogical dictionaries, although of very limited importance outside the French-speaking world, are a good case in point. They make it clear that the difference between the macrostructure (the arrangement of lemmata or keywords) and the microstructure (the arrangement of explaining elements complementing the keywords) is of importance for deciding between the two principles. In present-day dictionaries, there is no compromise possible between them in the macrostructure. Our dictionaries are either semasiological or onomasiological, either alphabetical or ideographical (etc.), but cannot be both. A mixed procedure, as is occasionally to be found in the past (e.g. Adrianus Junius' Nomenclator, 1567) is no longer acceptable. But for the microstructure of entries a compromise between the two principles is frequent or even the common case, at least in explanatory dictionaries. We should distinguish between two cases:

- (a) The explanation of word meanings by definition, paraphrase, quotation, etc. usually indicates overarching domains of which the lexeme in question is a member, as does the definition of a species by referring to the genus. Pragmatic tags like *terminology*, *medical language*, *poetry*, *nautical term*, etc. refer the reader to a general order which is helpful for finding the meaning of an individual word. In such cases, the mental processing goes both ways, *top-down* as well as *bottom-up*, which means it is onomasiologically as well as semasiologically oriented. We recognize an individual item by its features, but we also locate its place relative to higher ranking or coordinated ones.
- (b) Synonym dictionaries with an alphabetical ordering of key words complement them with various lexemes which have partly overlapping and slightly differing meanings (according to the usual definition of a synonym). As the boundaries of networks of synonyms vary between small groups and large word fields, the entry articles of these dictionaries can also vary enormously in length. They can consist of just a few lexemes complementing the first one, but also of lengthy enumerations of lexemes which list all the pertinent words of a field (as analogical dictionaries do). These entry articles, whether small or large, function as onomasiological (or ideographical) self-contained units on a small scale. Synonym dictionaries of this sort are in fact a sequence of content-oriented (ideographical, onomasiological) word-lists arranged in an alphabetical succession of their key-words. The user must engage in both methods of processing when consulting them.

The difference between these types of compromises is that (a) is inevitable for semanticization, but (b) is an artificial and deliberately planned product. In present-day lexicography, synonym dictionaries have been developed into highly sophisticated blends as can, for example, be seen in Longmans Language Activator of 1993 where a simple alphabetical dictionary and a complex synonym dictionary have been mixed in such a way that the latter functions as the explanatory part of the former. To sum up: The alternative between alphabetical (formal) and non-alphabetical (onomasiological, ideographical) dictionaries works only in their macrostructure. In their microstructure they are of a mixed nature because the techniques of semanticizing work in both ways. The only dictionary which is purely onomasiological in the macro- and also in the microstructure is the cumulative synonymy of the Roget-type Thesaurus. It does not semanticize at all but leaves this to the reader. (To my knowledge a synonym dictionary whose microstructure is alphabetical does not exist outside the usual natural and scientific taxonomies where, for example, the names of trees, etc. are given alphabetically.)

For synonym dictionaries the development of modern cognitive semantics is indeed of the highest importance. Its concepts come closer to the clustering of synonyms than any others do, because they were originally developed as units of the mental lexicon. They are psychologically rather than logically orientated. This brings our argument back to Igor Burkhanov's book.

The author gives a broad picture of the recent development of semantics (chapter 4) which the readers will welcome highly because their attention has been directed to it from the beginning of the book. (For chapter 3 see below.) He outlines field-theory in its structural, comparative, and cognitive elements. It has its counterpart in Eastern European linguistics in the concept of the (thematic, functional) word-group. It favours the onomasiological approach to lexis and, together with communicative grammar, has influenced language teaching enormously. It was followed by componential analysis where meanings appear as the configuration of features and this means as the combination of, possibly universally valid, atomic elements. With its clear-cut boundaries and methodical binarism it was more appropriate to logical thought than to common language use. This kind of language analysis took the expert's language as its model rather than the common man's. The fact that everyday performance and expert performance do not coincide itself triggered the ideas of cognitive linguistics with its concepts of prototypes (in word meanings and also in categorization) and of frames, scripts, scenarios, etc. instead of feature configurations and fields. A realistic classification was to replace the former idealistic one. Consequently, the idealistic classifications of world-knowledge in onomasiological dictionaries must now give way to new ordering principles which follow the order of folk knowledge. 'Frame', the most common one, is a complex of socially relevant scenes, situations, states, etc. in common life, where the multiple relations are explained with the help of a presupposed meaningful whole (as Fillmore, for example, pointed out by explaining words

for selling and buying). 'Script', in many respects its counterpart, is a series of events where, again, each action or step becomes meaningful as part of a higher unit of behaviour (as was explained by the example of going to a restaurant). 'Schema' is a more abstract unit of structural knowledge (for example, of the chemical elements). A script is to a cluster of actions what a frame is to a cluster of concepts. A frame is to common knowledge what a schema is to the more scientific type. Here again, a regrettable abundance of scientific terminology (correctly reported by the author) is to be found, because, besides using the terms mentioned, linguists also speak of 'idealized cognitive models', 'image schemas', 'domains', 'scenarios', 'interactive networks', etc. Moreover, categorization is now understood to be prototypical. This allows for fuzzy borders of meanings, membership of classes on the basis of family resemblances, and graded categorial status (insofar as, for example, a robin is much more a prototypical bird than a penguin, or an agentive noun is much more a prototypical subject of a sentence than it (in It is raining)). All these concepts have in common that they come from experience rather than from thought. It is obvious that such new constructs have the potential for giving dictionaries a new shape. They impose a new order on the presentation of words, provided this order is not determined by the empty formalism of the alphabet, and they demand new guidelines for meaning definition. The condition, however, on which these innovations can be accepted in lexicography is that they meet the needs of dictionary users who, after all, do not consult their books in order to look at linguistic systematization but to improve their linguistic competence.

Igor Burkhanov discusses three types of meaning-oriented dictionaries (chapter 3). The first, the thesaurus, has a classification according to the standards of accepted philosophy and the sciences. The ideological bias that inevitably goes with this system is obvious. But it is interesting to reflect on the idea that this bias is less strong on the lower levels of abstraction, where the entries of a dictionary appear, than on the higher ones, because even the ideological deduction of closed systems leaves the compilers some freedom for the choice and the arrangement of lexemes. The second, the thematic dictionary, is an ideographical (onomasiological) work curtailed to the needs of foreign language teaching. It is a dictionary type in which the practical purposes dominate scientific planning. The third, finally, is the systematic dictionary. (In the course of this chapter, the text alternates between calling this dictionary type 'systemic' and 'systematic'. Vis-à-vis the fact that there is a linguistic school which calls itself 'systemic' in opposition to 'structuralist' (e.g. M.A.K. Halliday), it should be made clear which adjective is meant — the rather general 'systematic' or the more specific 'systemic'). It takes as its principles of classification linguistic features between lexemes of one word-class, as they serve, for example, to subcategorize verbs and adjectives. They are regularly abstract semantic notions such as, for example, 'inherent property', 'dynamic property', 'relational property', and 'class membership' as features of adjectives (p. 135). It is, however, difficult to imagine a practical use for such dictionaries (of adjectives, of verbs, etc.) beyond the interest of linguists.

The characterization of the learner's ideographical dictionary of the general vocabulary (chapter 5) is the actual focus of the whole book. It starts with the sentences: 'The main purpose of this chapter is not an attempt to provide a comprehensive survey of the state of the art in pedagogical ideography with respect to foreign language teaching. Instead, it aims to raise questions, formulate some objectives, and illustrate the way in which this field of lexicography should be developing' (p. 199). After the long journey through the meanders of the semantics and lexicography of the last fifty years or so, this is a rather modest aim — and the author is to be praised for it, because he avoids the impression that ideal dictionaries for learners fall from the tree of linguistics like a ripe fruit.

The types of dictionaries discussed here are coursebooks, usage guides, minimal dictionaries, etc. Of course, they demand an overall classification and a format of meaning definition which serves the needs and the capabilities of their users — difficult as their assessment may be. For example, the method of Collins Cobuild Dictionary (1987) of giving meanings not by definitions (in metalanguage) but by quotations (in object language) has the advantage of showing the learners language-in-use and is, thus, presumably, what they need. Here the dictionary partly takes on the function of the coursebook. The main postulate of Igor Burkhanov, however, is that the new pedagogical dictionary, which he calls the Concept-Word Dictionary, has to interface grammar and meaning description, the conceptual domains, as, for example, described by Ronald Langacker, serving as the coordinates of a content-oriented dictionary. This means, among other demands, inserting learner-oriented explanations of those categories which structure lexis into the dictionaries. An example, the presentation of the category *time*, is given (p. 215). It is highly interesting because of two points, namely (a) the assumed possibility of explaining abstract concepts discursively so that they can be grasped by foreign language learners (who after all are not all of them academics), and (b) the assumed power of such reflections for boosting the learning process. Neither assumption has been tested so far, although it is certainly worth doing so. To explain word meanings by explaining the domains in which a lexeme is situated demands a high degree of metalanguage which will be difficult to control in its pedagogical effects. Ultimately, the proposed method means that cognitive linguistics in itself is the best method of foreign language teaching.

Many further deliberations on learning dictionaries deal with what has been part and parcel of so-called communicative language teaching for some decades now. It is valuable to find these criteria in a concise overview and to be reminded that they are rather a bundle with loose ends than a system of thought.

Finally, Igor Burkhanov discusses three procedures in the preparation of a dictionary, namely (a) the observation of daily communication (primary material) and of other dictionaries (secondary material), (b) the intuition of the native speaker, and (c) experiment in the sense of Labov and Eleanor Rosch. These are the ways that lead to the entry articles whose new shapes are given

in several examples (chapter 6). These are lexemes denoting, for example, 'landscape features' (like mountain, island, district) or physical objects, domains like 'similarity', 'smoking', or 'artefacts' (the latter in a crosslinguistic comparison). The defining categories which separate them from neighbouring lexemes (like altitude, shape, relative position, etc. in the case of mountain) are to be found and tested by the three procedures mentioned. This leads to highly interesting analyses by the author. It is important that he also has a clear idea of their pedagogical presentation: 'In addition to cross-references intended to account for the general conceptual affinities [...], a learner-oriented ideographic dictionary should provide adequate explications of the organizing concepts [...]. Those descriptive definitions of the conceptual domains in question can be presented after the headings and before the lemmata assigned to the semantic domains in question' (p. 303). Various entries are offered as models for the envisaged Concept-Word Dictionary, either as a frame or as a script. They are fascinating to read. In fact, the dictionary as a word-list with attached explanations is here replaced by a meta-lexicographical explanation of how to arrive at these explanations by observation, intuition, and experiment. The idea is intriguing, the examples are convincing. The question is, however, open of whether this 'explaining how to explain' is really helpful for foreign language learning.

Igor Burkhanov's book makes a very interesting and stimulating read. It gives plenty of information and also food for critical thought. Not the least profit for the reader versed in the Western tradition of language pedagogy is to be gained from the author's frequent references to publications on the topic in Central and Eastern Europe which otherwise (alas) would remain unknown.

Endnotes

Baldinger, K. 1960. Alphabetisch oder begrifflich gegliedertes Wörterbuch? Zeitschrift für Romanische Philologie 76: 521-36.

Green, J. 1997. Chasing the Sun. Dictionary-Makers and the Dictionaries They Made. London: Pimlico.
Haß-Zumkehr, U. 2001. Deutsche Wörterbücher. Brennpunkt von Sprach- und Kulturgeschichte. Berlin/
New York: Mouton de Gruyter.

Hüllen, W. 1999. English Dictionaries 800–1700: The Topical Tradition. Oxford: Clarendon.

Hüllen, W. 2000. John Locke, Semanticist. Dalton-Puffer, C., and N. Ritt (Eds.). Words: Structure, Meaning, Function: 141-52. Berlin/New York: Mouton de Gruyter.

> Werner Hüllen University of Essen Herchenbachstrasse 1 40470 Düsseldorf Germany (werner.huellen@uni-essen.de)