

Meaning-Text Theory: Linguistics, Lexicography, and Implications

James Steele (editor)
(Carleton University)

Ottawa: University of Ottawa Press,
1990, xi + 439 pp. Paperbound, ISBN
0-7766-0289-6, \$35.00

Reviewed by
Svatava Machová
Charles University

Since the mid-1960s, the development of Meaning-Text Theory (MTT) can be followed in Russian, French, and English publications. The main authors of this theory are I. A. Mel'čuk and A. K. Žolkowskij, the first works with a more global insight into MTT being Žolkowskij and Mel'čuk (1965, 1967). Since that time, MTT has been developing and has brought considerable results. Nowadays, there are hundreds of works dealing with MTT.

The book *Meaning-Text Theory*, edited by J. Steele, consists of thirteen articles and three appendices. All the articles are linked by one topic—MTT. Most were written for the book; three were translated and/or adopted from other publications. The articles are grouped in three parts:

1. Linguistics: Theoretical Contexts (pp. 1–40);
2. Lexicography: The Explanatory Combinatorial Dictionary (pp. 41–272);
3. Implications and Applications (pp. 273–392).

Except for A.R. Luria (a deceased Soviet psychologist), the nine authors are from universities in Canada and the U.S. They were brought together by a deep interest in MTT and by their efforts made to apply MTT to English.

For those readers who do not know MTT yet, Alexander Nakhimovsky sums up its essence (“Word Meaning and Syntactic Structure: Some Comparative Notes,” pp. 3–17). He lists the levels that constitute the language description in the framework of MTT, and focuses his attention on the concepts of semantic and syntactic valence. He describes the starting points of MTT and compares some of the most general features of MTT with both older and more recent theories of Chomsky. (By mistake, obviously, not all Chomsky’s works quoted in Nakhimovsky’s text are given in the bibliography. Those missing are Chomsky’s works of 1965, 1972, and 1977.) In view of the content of the articles in Part 2 of the book, the concise description of the MTT lexical entry included in this article appears somewhat redundant.

Johanna Nichols, in her article “The Meeting of East and West: Confrontation and Convergence in Contemporary Linguistics” (pp. 18–37), published originally in 1979, offers a hypothesis that two opposing linguistic theories of the 20th century, namely structural linguistics and generative linguistics, show evidence of convergence. As representative of structural linguistics, she chooses traditional Russian grammars. She lists and explains phenomena in which, even today, the two schools differ conspic-

uously and, at the same time, brings evidence that in interpreting some phenomena (e.g., the position of subject and object in a sentence; semantic roles) both of these schools developed similarly. This development is, according to her view, spontaneous, without evidence of mutual influence. The author fails to offer any hypothesis explaining this fact. (The meaning of the words *east* and *west* is relative, of course. It changes according to where the speaker is at the moment of speaking. Nevertheless, I do not consider it fortunate that the label *east* is attributed to structuralism.)

The key component of MTT is an explanatory combinatorial dictionary (ECD), which constitutes the tool for organizing lexical information. The ECD unit is the entry describing one lexeme. A higher unit is the super-entry describing one vocable. Semantic and collocational relations between lexemes are described in the ECD by means of lexical functions. They provide a powerful tool for the general and systematic description of many substitutions and collocations that might otherwise appear singular and irregular. J. Steele and I. Meyer state in their article "Lexical Functions in an Explanatory Combinatorial Dictionary: Kinds, Descriptions, and English Examples" (pp. 41–61) that more than 60 lexical functions described in various works of Mel'čuk and Žolkowskij had been identified so far. The lexical functions had been widely exemplified in the Russian and French languages. The objective of the article is to exemplify the lexical functions in English and classify them in such a way as to make it possible to group them into easily remembered groups. The fact that lexical functions are identified intuitively in the MTT and that they are universal for all languages is not stated explicitly in the article; neither is it stated explicitly that we can never say that all the lexical functions have already been identified. This important information can be found in some previous works by Žolkowskij and Mel'čuk (e.g., 1965, 1967).

To my knowledge, three ECD volumes have so far been published: one concerning the Russian language (Mel'čuk and Žolkowskij 1984) and two concerning the French language (Mel'čuk et al. 1984, 1988). The third volume devoted to French should appear in 1991. The first and second volumes of the French dictionary were accompanied by a French article by L. Elnitsky explaining the structure of an entry in the ECD. I. Meyer and J. Steele translated these two articles into English and completed them. The resulting article, "The Presentation of an Entry and Super-Entry in an ECD of English" (pp. 62–94), describes and illustrates in great detail, and with great precision and intelligibility, the structure of an entry and a super-entry.

After these follow the articles by I. Mackenzie (pp. 95–130), J. Steele (pp. 131–158), and Z. Chen (pp. 159–174) presenting the super-entries *escape*, *hope*, *teach*, and *teaching* for an ECD of English. In the book there is no mention of any team of authors preparing an ECD of English. Consequently, it cannot be decided whether the above four vocables constitute an isolated probe or a component of an ECD of English in preparation.

I consider the article by I. Meyer "Interlingual Meaning-Text Lexicography: Towards a New Type of Dictionary for Translation" (pp. 175–270) to be the crucial one. It is a summary of her Ph.D. dissertation directed by Mel'čuk. It contains global information on the ECD as well as a proposal for a model for a new type of bilingual dictionary based on ECD principles for the translation from native into non-native languages. The ECD had not been originally conceived as a commercial dictionary. It was rather intended to be a theoretical lexicon, an integral part of the scientific description of a given language. One of the reasons for this was that it was considered to be absolutely unacceptable to publish the ECD in the scope of a large dictionary. It is only thanks to recent technology that the barriers of the book have been bro-

ken and huge dictionary material can be stored on a CD in such a way as to give the user easy and rapid access to the information required. Thus, the technology enables commercialization of the ECD and also the bilingual dictionary based on this model.

The great amount of work that has to be done to create a large bilingual dictionary based on the ECD model (containing, e.g., 100,000 super-entries) can be figured from the one illustrative super-entry processed by Meyer and included in her article: the super-entry *tête* and its English equivalents. This one bilingual super-entry takes 72 pages. From the super-entry, we can infer the structure of the future bilingual dictionary based on the ECD and see the matching complexities existing between any source-language and target-language pair.

In keeping with the ECD tradition, it is introspection that is favored as the principal source of lexicographic evidence. During the initial compilation of the entry *tête*, the author started from her own linguistic intuition and from her skill in translating from French into English. She combined her intuition with the information found in a number of dictionaries and reference works, and had the result of her initial compilation verified and modified by 19 informants. The result of this extensive work is impressive. Each translator would like to have such a dictionary at his/her disposal.

The third part of the book is devoted to neuropsychology, computational linguistics, and language learning in connection with the MTT. The article by A.R. Luria, "The Problem of Verbal Communication" (pp. 273–324), was published as early as 1979. Luria believes that the MTT represents an important advance towards the explanation of neuropsychological processes involved in speech production. He proposes a hypothesis that the number of lexical functions points broadly to the amount of semantic connection between words.

A. Nakhimovsky ("A Lexicon-Based Algorithm for Ambiguity Resolution in Parsing," pp. 326–349) draws attention to the fact that some information given in the ECD can be used in solving some problems of syntactic ambiguity in computer text processing. It can be added that in a number of experiments in machine translation in Europe, syntactic verbal valence is used in a process of text analysis, even though some theory other than the MTT might constitute the theoretical linguistic background for the algorithm.

The article by J. E. Grimes (pp. 350–364) is devoted to the notion of inverse lexical function. The idea that the notion of lexical function can be used by language teachers to help students learn proper lexical collocations and develop a richer vocabulary is treated in the article by R. L. Leed and A. Nakhimovsky, "Lexical Functions and Language Learning" (pp. 365–375). According to Steele ("Meaning-Text Theory and First Language Learning: Some Implications," pp. 376–390), knowledge of lexical functions will help English students enlarge their vocabulary and, unlike the mere acquisition of a sentence-forming capability, it will enable them to master the English language.

The bibliography of works on MTT in English and French published before 1990 is given in Appendix 3 (pp. 417–432). Its authors are Steele and Meyer. There are 139 English works and 41 French works included in the bibliography. More correctly, there should be 40 French works only; the work by Tesnière (*Eléments de Syntaxe Structurale*, Paris, 1966) must have been one of the starting points for the authors of the MTT, but it can, however, hardly be considered a work *on* MTT. The transliteration of the authors' names from the Cyrillic alphabet is not uniform (e.g., *Apresjan–Apresyan*, *Ščeglov–Shcheglov*, *Žolkovskij–Zholkovsky*). The transliteration chosen is probably in harmony with that used by each author in their work.

There are a number of interesting projects in present-day lexicography, the most interesting being, to my mind, the *Collins COBUILD English Language Dictionary* and the project of the bilingual dictionary based on ECD principles. In *Meaning-Text Theory*, the reader has the opportunity of becoming acquainted with the latter for the first time. Nor should the book escape the notice of those dealing with lexical semantics and looking for the ways that contrastive lexicology should take in the future.

References

Mel'čuk, I. A. et al. (1984 and 1988).

Dictionnaire explicatif et combinatoire du français contemporain: Recherche lexico-sémantique (Volume I, 1984; Volume II, 1988). Montréal: Les Presses de l'Université de Montréal.

Mel'čuk, I. A., and Žolkowskij A. K. (1984).
Explanatory Combinatorial Dictionary of

Modern Russian. Vienna.

Žolkowskij, A. K., and Mel'čuk, I. A. (1965).
"On potential methods and tools of semantic synthesis" [in Russian].
Naučno-Tekničeskaja Informacija, No. 6, 23–28.

Žolkowskij, A. K., and Mel'čuk, I. A. (1967).
"On semantic synthesis" [in Russian].
Problemy Kibernetiki, No. 19, 177–238.

Svatava Machová received her Ph.D. in computational linguistics from Charles University, Prague, in 1970. She is presently a senior lecturer in the University Teachers' Training College. Her research has included lexical components of question-answering systems and multilingual terminological databanks. Her address is: Teachers' Training College, Charles University, M. Retigové 4, 110 00 Prague 1, Czechoslovakia.