

REVIEWS

Aspects of the psychomechanics of speech production. By Stanisław Puppel. Pp. 118. Poznań: University of Poznań Press. 1988 Reviewed by Henry Niedzielski, University of Hawaii, Honolulu.

Puppel is to be commended for presenting a clear and convincing description of a holistic approach to speech production. Organized in nine chapters, this study views speech production as a correspondence between the mental representation, or image, of an utterance and its physical realisation. This correspondence is embodied in a process based on a hierarchic organization which is temporally determined, topologically finite — its spatial extension coincides with the bounds of an extension of another utterance — and vertically integrated.

A neuromotor mechanism, functioning as an open-loop translation mechanism, concretizes the image into neurophysiologically constrained sounds produced in a rapid seriation of syllables or coarticulated phenomena. The serial ordering of these sound segments is possible only because the speaker has a preprogrammed psychomechanic plan. Although Puppel does not clearly state it (p. 5), one might presume that, in speech perception, an inverse process operates from acoustic signs to a psychological, likewise extralinguistic image.

Speech encoding is realized in two phases: a planning phase — the Programme—Planning Complex or PPC — and an execution phase — the Speech Production Mechanism or SPM (p. 37). The PPC elaborates a global outline of a plan for an utterance into successively smaller and smaller (principal) syntactic constituents, lexical constituents, syllabic constituents, and segmental constituents. The SPM converts neuromotor and muscular movements, corresponding to the PPC's segmental constituents, into overlapping articulatory gestures translated into acoustic output. The two phases are vertically integrated in a time sequence of elaboration, called "notional" time, while the seriation is sequentially organized in a "clock" time.

While encoding progress in a "top-down" scheme guided by a psychoneurological "feedforward" (64), speech production also involves as "bottom-up" sensory flow of control provided by auditory, tactile, and kinesthetic feedback (58). Through their storage and retrieval aspects, short and long term memories participate actively in both feedforward and feedback.

To build the above synthesis of psychomechanic speech production, Puppel has consulted one hundred ninety previous publications referenced in his bibliography. Authors such as Daniloff and Hammarberg, Fromkin, Fujisaki, Glencross, Koestler, Lenneberg, Liberman, MacNeilage and Ladefoged, Popper and Eccles are referred to, but, surprisingly, no mention is made of Gustave Guillaume who coined the term "psychomécanique du langage" three decades ago.

To illustrate his cognitive-interactive model of speech production, Puppel provides original, detailed, and clear examples of its process in the production of the word *be* in chapter seven (65–88) and of the sounds /p, t, k/ in contrast with /b, d, g/ in chapter eight (89–102). The open loop of the conceptual interactive model of speech production is clearly diagrammed with its diphasic encoding (PPC and SPM), its feedback executive control, and its memory factors (88).

After summarizing the “aspects of the psychomechanics of speech production”, Puppel recognizes the need for “considerable attention and extensive studies in the problem of interaction of central (preprogramming) and peripheral (feedback) mechanisms in the production of meaningful patterns of muscular movements which underlie successful speech production” (104).

It is this reviewer’s opinion that Puppel’s very comprehensive synthesis of the state of research on speech production, together with the practical illustration he offers of his holistic and teleological approach, could constitute a solid basis or point of departure for experimental studies of that interaction.

In addition, although this book considers exclusively speech production by monolingual speakers, and addresses first language learning only marginally — when it mentions the increasing role of preprogramming strategy with higher linguistic competence and memory capacity (89) — it could also offer many insights into processes involved in the learning of foreign speech. Since its author is a language teacher, it is hoped that he will apply his superb patience and superior “esprit de synthèse” to these other aspects of speech production and/or speech reception.

ZüriLEX 86' Proceedings. Papers read at the EURALEX International Congress, By Mary Snell-Hornby (ed.). Pp. XI+447. Tübingen, A. Francke Verlag GmbH, 1988. Reviewed by Danuta Wolfram-Romanowska, Adam Mickiewicz University, Poznań.

ZüriLEX '86 Proceedings, edited by Mary Snell-Hornby, professor of the University of Vienna and one of the most active founding members of the European Association for Lexicography (Euralex), appeared two years after the conference, i.e. in 1988. A long interval, but considering the limited financial resources of Euralex and the format of the book, the fact that it has been published is an achievement. This was made possible by the sponsors mentioned by the editor in the preface: the University of Zürich and the publisher A. Francke Verlag.

The European Association for Lexicography, Euralex, is an organisation established in 1983 in Exeter, England, where the first, preliminary conference was held. Its purpose is to exchange theoretical and practical information on dictionary making. Since its beginning, Euralex’s membership has expanded and this was most evident at the conference in Budapest in 1988 where there were over 160 participants, including non-members. This interest is the best indicator of how important the organisation and the conferences are to the community of lexicographers.

It is very difficult for the reviewer to discuss every paper in the book as it includes 46 papers, not to mention the great variety of topics ranging from semantics (Chapter I), through techniques of dictionary making (Chapter II), language learning (Chapter III), historical lexicography (Chapter IV), Swiss dialect lexicography (Chapter V), bilingual lexicography and terminology (Chapter VI), to computational lexicography (Chapter VII). Therefore, the writer of the present review will focus her interest on the articles which in her opinion are the most and the least useful to the dictionary-making practice.

This approach has been chosen because a great number of participants in Euralex conferences, particularly recently, have been voicing more and more resentment of the growing “theoretical” or “historical” trends at the conferences, while the expectations of the majority of them are to discuss how to make better dictionaries by improving on the imperfections that lexicographers are aware of but do not know how to solve, or to learn how to detect and eliminate faults they do not realize exist.

ZüriLEX '86 Proceedings comprise many extremely interesting contributions, one of the most pertinent of them, in the reviewer’s opinion, being “Why the monolingual learner’s dictionary should move away from the native-speaker tradition” by Michael Rundell (pp. 127–37), who argues that these dictionaries should do away with the central treatment of meaning by giving equal weight to all relevant features — grammar, style, synonymy, contextual and syntagmatic preferences, etc. Moreover, he suggests that word meaning explanations based on the “prototype” approach admitting of minor variations and category membership be used rather than the rigorously “criterial” approach, most frequently encountered in learner’s dictionaries. He also raises one more significant practical issue: combinatorial properties of words are in most cases limited by style, context, collocational and other constraints, therefore, they should be treated likewise in these dictionaries, contrary to the native speaker’s dictionaries treating the features as unlimited and free-standing. Thus, the traditional native-speaker’s approach should be reexamined and revised in consideration of the suggestion.

When analysing the papers concerning “dictionary semantics” one should, first of all, mention “Typicality and meaning potentials” by Patrick Hanks (pp. 37–47) and “Metaphor in dictionaries” by John Ayto (pp. 49–54). The first emphasizes the need for providing explicit information to the dictionary reader on the typical usages of words, and not only marking rare usages, as has been done to date. The author backs up his point with a number of interesting examples. John Ayto’s issue, in turn, is how to handle metaphors in dictionaries. The author not only presents and criticizes their treatment in American and British dictionaries, but he also — and this is the most valuable part of the article — gives the lexicographer specific solutions with an example of a complete entry “cat”. Both articles will certainly be welcome by dictionary writers and publishers.

A related topic of metaphor and idiom is discussed by Stefania Nuccorini in “The treatment of metaphorical and idiomatic expressions in learner’s dictionaries” (pp. 149–160) where she critically examines two of the most often used dictionaries — the *Oxford Advanced Learner’s Dictionary of Current English* and the *Longman Dictionary of Contemporary English* — and proposes what kind of metaphors should be included in dictionaries and how idioms should be approached.

Tamas Magay in “On some problems of the bilingual learner’s dictionary” (pp. 171–177) claims that “a dictionary maker is nothing more than a qualified dictionary user”. Taking this statement as his point of departure he gives several useful critical remarks on grammar, usage and meaning problems that he encountered when updating a Hungarian-English dictionary for which work he was forced to rely on monolingual English dictionaries. The examples — relating to adjectives, phrasal verbs, synonymy and labelling — although pertaining to the difficulties posed by the confrontation of English and Hungarian — may shed light on problems of a similar nature which exist between and across other languages.

An interesting chapter of the *Proceedings* is one on “The role of the computer in lexicography”, as it reflects an ever growing interest in “computational” lexicography around the world. Euralex itself encourages this development trend in lexicography by, among other initiatives, attempting to create data bases for most European languages. The involvement of the community of lexicographers remains, however, limited because

apart from several strong centres (e.g. the University of Pisa and the University of Birmingham) such projects require computer experts and adequate equipment.

The present book under review has, however, several articles that are of a lesser interest to the practising lexicographer. These include, for example, such subject limited papers as "The Latin-French dictionarius of Firmin Le Fer (1420—1440)" by Brian Merriees (pp. 181—89), "From translation to analogy: The birth of the Etymon in the 16th century French lexicography" by Paul di Virgilio (pp. 189—198), and the articles in the chapter on lexicography in Switzerland (with an exception of, perhaps, "Dialect dictionaries — a contradiction in itself?" by Hanks Kuhm (pp. 237—247), whose article give insights of a more general nature and applicability. Moreover, some contributions are too much of a theoretical nature. An instance of this group of articles is Barbara Lewandowska-Tomaszczyk's "Universal concepts and language specific meaning" (pp. 17—26) which dwells on theoretical semantic problems. Although the work hints at the applicability of the problems to lexicography, yet the relationships are too remote to be of immediate use. From the point of view of the semanticist, the detailed discussion of various approaches to meaning with an array of recognized names quoted (e.g. Katz and Fodor, Putnam, Pilman, Jackendoff, Fillmore, etc.), as well as the author's own suggestion of semantic hierarchies, is an extremely interesting linguistic contribution, but for the lexicographer the implications are not relevant enough. Euralex is an association for, first of all, lexicographers, from which follows its practical, rather than theoretical, orientation. In fact, when this paper was read at the ZüriLEX conference, numerous participants voiced a similar opinion as they were frustrated with not being able to fully comprehend the problems argued by the author.

It is regrettable that the editors did not provide English language abstracts for quite a few articles written originally in German (7), French (3), or Italian (1). Although most learned lexicographers usually speak at least two or more foreign languages, the comprehension of others may create a problem. The Euralex conferences themselves have proved that the English language is the most preferable and understood tongue for the majority of participants. The reviewer wonders how the editors of the *BudaLEX Proceedings*, papers read at a recent Euralex conference held in Budapest in 1988, will deal with the problem of the numerous articles read in Russian there.

Overall, the reviewer finds this book interesting. It provides a lot of information on the current worldwide trends in lexicological research and dictionary-making. Most of the assumptions made in the articles are convincing and, undoubtedly, useful for all working lexicographers.