

## Book Reviews

*Adult ESL: Politics, pedagogy, and participation in classroom and community programs.* Trudy Smoke (Ed.). Mahwah, NJ: Erlbaum, 1998. Pp. 337.

This anthology consists of 20 chapters contributed by 25 authors and coauthors; its articles are divided into three sections corresponding to the title categories: politics, pedagogy, and participation. As Trudy Smoke states in the preface, “I decided to use the term *adult* ESL in its broadest sense – non-native speaking adults who participate in ABE (adult basic education), community college, or senior college programs” (p. ix). However, about 75% of the articles are written from a community college or senior college perspective, with a focus on intermediate-level or above English language learners. There is nothing inherently wrong with this; in fact, it may be inevitable that college ESL teachers are more likely to be able to write articles than their ABE colleagues, who are among the most overworked and underpaid teachers in U.S. education. Smoke notes briefly that some ESL students in ABE programs eventually enroll in community and senior colleges, but for the most part the reader is left having to infer how the insights of college ESL practice and research might apply to teachers in community-based ABE programs in ESL. A more extended discussion of the similarities and differences between ABE and college-based learners would have made the book more useful, especially for new teachers or other readers not familiar with the field.

About half of the articles are written primarily from a first person, teacher’s perspective. The best of the first person pieces offer instructive and sometimes poignant vignettes of adult ESL classroom life and various interpretations of how the surrounding political and social contexts shape teacher–student interactions. In addition, some authors share frank reflections on the moral and political dilemmas faced by ESL teachers as they try to cope with federal and state immigration regulations and initiatives; recurrent funding crises at the national, state, and local levels; and cultural differences in the classroom.

By their nature, such personal essays are bound to include a broad range of perspectives and styles of expression. Nevertheless, Timotha Doane’s article, “Democracy in the ESL Classroom,” seems out of place – at least in the form in which it appears. It touches somewhat briefly and elliptically on problem posing, the stress and trauma in students’ lives, and the salutary benefits of teacher-led yoga exercises, but it does not touch on democracy in any way that I recognized. Here Doane writes about the “praxis spiral”:

The key to practice is in the relationship we create with the learners, because that relationship is where we are present with each other. We believe that qualities of learning and society come out of the quality of relationship. In presence, we find intelligence. (p. 160)

The academic, journal-style chapters are generally well referenced and clearly written. I will note just a few to suggest the breadth of the topics discussed. "Promoting Gender Equality in the ESL Class" by Stephanie Vandrick (p. 73) does a masterful job of relating a comprehensive literature review on the topic to issues of classroom practices, materials, and principles. "The Political Implications of Responses to Second Language Writing" by Carol Severino (p. 185) proposes in Table 13.1 a "Continuum Representing Political Stances Toward Second Language Writing" (p. 189) that extends across the categories taken from the classical studies of immigration: "Separatist," "Accommodationist," and "Assimilationist." Using selections from three student essays, Severino illustrates how this continuum can be used to analyze and understand the interaction of sociocultural factors with writing form, mechanics, and rhetorical approach. Angela Parrino deserves credit for taking on "The Politics of Pronunciation and the Adult Learner" (p. 171), a topic that ESL teachers are sometimes reluctant to discuss. A list of her subheadings suggests the scope and salience of her chapter: "Speech Production," "Speech Performance," "Realistic Versus Unrealistic Goals and Expectations," and "Variables That Impact on the Pronunciation of a Second Language." Parrino's chapter is one of several that would be very helpful for new teachers to read. Chapters 18, 19, and 20 address the uses of technology in the field of ESL – for teacher training and sharing, for improved English acquisition, and, via the Internet, for helping students learn more about U.S. culture and also remain in close touch with their home cultures.

"Building on Community Strengths: A Model for Training Literacy Instructors" by Elsa Auerbach, Joanne Arnaud, Carol Chandler, and Ana Zambrano (p. 209) is especially thought-provoking. This chapter is a description and appraisal of a "project designed to train immigrants and refugees to become literacy instructors in their own communities" (p. 209). The idea makes sense: many people from immigrant communities have cultural knowledge and skills about negotiating the new society that are important to pass on to new immigrants from that community. At two of the three project sites, the interns taught native language literacy, while at a third site they taught ESL. Since this chapter appears in a book about adult ESL, most of the following questions relate to the use of community interns for this latter purpose.

The authors describe what they termed the brief "Freirian" participatory training that the community interns received. They then report on the qualitative evaluations by the interns and the ESL and native language literacy students. The interns' reports were generally positive, with many expressing a sense of fulfillment at being able to do work that was far more rewarding than their often menial regular jobs. The authors note that some of the students' responses were more negative. A few of the ESL students asked, "Why don't I have an American teacher?" (p. 220). This is a fair question. If the readers of this journal were learning a foreign language, would they not prefer a native speaker as a teacher?

Leaving aside the native language literacy part of the project, are such community interns, trained as the authors describe, better for the ESL students than professional ESL teachers? Could not ESL students gain cultural expertise from community people working as counselors rather than English teachers? Unfortunately, we do not know whether this approach was better for students because

the project did not measure this seemingly critical outcome. There were no control groups, nor do the authors report on any formal or informal pre- or postassessments of language or literacy. This is especially surprising in a field that prides itself on being student centered.

In fairness to the authors, it should be stressed that the interns at two of their three sites were engaged in native language literacy teaching – not ESL. In addition, they do not present the project as a formal research inquiry, viewing it instead as a useful experiment with many important lessons learned.

In summary, this collected volume presents an accurate picture of the state of the field and its practitioners. Like the field of adult ESL, the book's discussions of politics and participation are often richer and more developed than its discussions of pedagogy. One can also see how the organizing categories of politics, pedagogy, and participation not only overlap, but occasionally collide. Perhaps we can minimize these collisions by placing students' needs for efficient, professional teaching of English at the center. The example of Paolo Freire reminds us that there need be no contradiction between pedagogical expertise and the field's proud and long-standing commitments to social justice, cultural autonomy, and individual expression. Freire was not only an insightful and committed social activist, but also a knowledgeable and innovative reading teacher.

To put the issue of professional expertise in perspective, it may be helpful to consider another typical adult transaction outside the field of literacy. Most of us would prefer a dentist who was humane, considerate, and respectful of our cultural heritage. These qualities are important but not sufficient: if the dentist were not good at fixing our teeth, we would probably look elsewhere.

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*WordNet: An electronic lexical database.* Christiane Fellbaum (Ed.). Cambridge, MA: MIT Press, 1998. Pp. 423.

WordNet is an on-line relational database of the English lexicon developed by George Miller and coworkers at Princeton University (Miller, Beckwith, Fellbaum, Gross, & Miller, 1990). The meaning of a particular word in WordNet is expressed principally through its relations to other words and sets of synonyms, with the structure of the database reflecting the current psycholinguistic understanding of the mental lexicon.

*WordNet: An electronic lexical database* is a collection of articles that aims to give an up-to-date account of the WordNet project. It is divided into three sections: Part I, "The Lexical Database," provides a description of the contents and structure of WordNet; Part II contains three chapters on "Extensions, Enhancements, and New Perspectives on WordNet"; and Part III, "Applications of WordNet," is composed of nine applications of WordNet, from semantic concordances to software engineering. The book begins with an interesting foreword, which provides a history of the development of the database and an informative, readable introduction outlining the main segments of the book.

Part I is made up of three chapters on the organization of words in WordNet and a fourth chapter on the design and implementation of the database. The first three chapters provide clear and concise explanations of the organization of WordNet. In Chapter 1, G. Miller presents a description of the semantic organization of nouns, based on tree structure of connecting lexical relations; in Chapter 2, K. Miller describes the organization of adjectives and adverbs in WordNet; in Chapter 3, Fellbaum describes the complex tree structure of verbs. The latter is denser than the chapters on nouns and modifiers, reflecting the greater semantic complexity of verbs compared to nouns, adjectives, or adverbs. Despite the acknowledgment that verbs and nouns are at least as strongly related as verbs are with other verbs in human lexical memory (p. 91), direct links between words from different word classes are not provided in WordNet.

Each chapter describes particular difficulties associated with each word class. For example, Chapter 3 discusses the difficulties encountered when attempting to divide the verb lexicon into discrete semantic domains when faced with stative verbs and auxiliary verbs that do not lend themselves to such classification. Since WordNet aspires to reflect the lexical organization of an English speaker, these chapters also serve as a description of the current knowledge of the mental lexicon.

In Chapter 4, "Design and Implementation of the WordNet Lexical Database and Searching Software," Tengi describes in detail the design and implementation of the WordNet database and its associated software. Topics include the creation of the lexical source files, the conversion of these files to the WordNet database, the organization and format of the database files, and the software used to retrieve information from the database. This chapter includes a significant amount of technical information that may be beyond the nonspecialist audience. (Although presented in Part III as an application, Chapter 16, "Knowledge Processing on an Extended WordNet," is an informative supplement to Part I, offering clear summaries of WordNet relations.)

In Part II, three different extensions to WordNet are outlined. In Chapter 5, "Automated Discovery of WordNet Relations," Hearst provides a method for searching corpora for lexicosyntactic patterns that correspond to WordNet lexical relations. Although WordNet contains a large number of relational links between words (e.g., the IS-A relation, as in *a novel is a kind of a book*), these are not exhaustive. The purpose of Hearst's automatic search is to add particular instances of lexical relations that do not currently exist in WordNet. For example, the extraction technique can find a pattern (e.g., "bruises, . . . broken bones, or other injuries") and deduce the hyponym relation expressed in that structure (i.e., a broken bone is a kind of injury) (p. 134). Unfortunately, the hyponym relation is the only one dealt with in this chapter, although the author indicates that the method could be transferred to other lexical relations.

Chapter 6, "Representing Verb Alternations in WordNet," by Kohl, Jones, Berwick, and Nomura, has a more linguistic focus than the other chapters. This chapter demonstrates an extension of the semantic information in WordNet in the use of lexicographic tools to investigate linguistic questions: in this case, the fact that semantically similar verbs tend to have the same syntactic patterns. In particular, this chapter looks at verb alternations in WordNet: for example,

the causative alternation in verbs such as *turn*, *bend*, and *crease*, as in *Janet turned the cup* and *The cup turned* (p. 156). The extension of verb alternation highlights deficiencies in WordNet: for example, the fact that some semantic classes (e.g., as verbs prefixed with *de-* and *un-*) are largely absent. It is unclear whether the verb alternation program is part of WordNet proper, but at the time of writing the chapter, it was expected that WordNet 1.6 would include alternation information for more than 2,600 verbs, including a software component to make the patterns accessible to the user. A minor problem with Chapter 6 is that, although most of the book is based on version 1.5 (p. 1), the figures show screen dumps using WordNet 1.3.

In Chapter 7, "The Formalization of WordNet by Methods of Relational Concept Analysis," Priss provides a mathematical formalization of WordNet for investigating the logical properties of semantic relations and, in particular, for discovering irregularities among WordNet's semantic relations. It uses formal concept analysis and relies on the hierarchical and relational structure of the database. The chapter is more mathematical and linguistic in content and, like Chapter 6, may be less accessible than other chapters to nonspecialist readers.

Part III contains descriptions of natural language processing and information retrieval applications that have used WordNet. The applications included here were chosen to reflect the diversity of current uses and to highlight the potential uses of WordNet in a number of different areas. The applications covered are: concordances (Chapter 8, "Building Semantic Concordances," by Landes, Leacock, & Tengi); word sense identification (Chapter 9, "Performance and Confidence in a Semantic Annotation Task," by Fellbaum, Grabowski, & Landes, and Chapter 11, "Combining Local Context and WordNet Similarity for Word Sense Identification," by Leacock & Chodorow); taxonomic level knowledge (Chapter 10, "WordNet and Class-Based Probabilities," by Resnik); information retrieval (Chapter 12, "Using WordNet for Text Retrieval," by Voorhees); lexical chaining (Chapter 13, "Lexical Chains as Representations of Context for the Detection and Correction of Malapropisms," by Hirst & St-Onge, and Chapter 14, "Temporal Indexing Through Lexical Chaining," by Al-Halimi & Kazman); conceptual modeling (Chapter 15, "COLOR-X: Using Knowledge from WordNet for Conceptual Modeling," by Burg & van de Riet); and knowledge processing (Chapter 16, "Knowledge Processing on an Extended WordNet," by Harabagiu & Moldovan). Although the chapters vary widely in topic and scope, collectively they provide a broad picture of the power of WordNet, complementing the description of the database in Part I. These chapters highlight the positive features of WordNet that allow research to proceed. Frequently the authors also point out the limitations of WordNet, with respect to their particular research. For example, in Chapter 16, Harabagiu and Moldovan point out the paucity of compound lexical items and causation and entailment relations in WordNet. A number of researchers comment on the difficulties created by the lack of cross-category lexical relations in WordNet. These relations are not included in WordNet because the database is organized solely on paradigmatic relations (a deliberate decision made by the WordNet designers).

Part III is less cohesive than Parts I and II of the volume. The degree to which applications are justified or their practical use explained varies, ranging

from the clearly explained use of lexical chains constructed from WordNet to correct malapropisms (Chapter 13) to the relatively unfocused application of corpus-based statistical methods to knowledge-based taxonomies (Chapter 10). Each chapter in Part III could be read independently, and in general the authors explain the relevant background to each article. A good example of this is Chapter 11, in which Leacock and Chodorow provide a concise explanation of the organization of nouns in WordNet as a background to their experiments on word sense identification (p. 274). Nevertheless, someone lacking all familiarity with WordNet would need to refer to the material in Part I.

The book contains a short appendix with brief instructions on obtaining WordNet 1.6 (from the World Wide Web site at <http://www.cogsci.princeton.edu/~wn/>), including practical information regarding the software. There is also a combined author and subject index.

This work would prove worthwhile reading for those interested in dictionaries or the mental lexicon and for computational linguists, researchers in natural language processing and artificial intelligence, and psycholinguists (although, as G. Miller points out [p. 43], WordNet has been largely ignored by the last group). The number of people using the WordNet database has increased dramatically during the last decade, which justifies the publication of a description of the database and its extensions and applications. The juxtaposition of a basic, if thorough, description of the lexical database and detailed technical applications of WordNet makes reading the book cover to cover unlikely. Newcomers to lexical databases may be more interested in Parts I ("The Lexical Database") and II ("Extensions, Enhancements, and New Perspectives on WordNet"), while researchers with the relevant research interests may be more interested in Part III ("Applications of WordNet") and, to a lesser extent, Part II. A minor, but perhaps unavoidable, frustration throughout the book is that the majority of the chapters are based on version 1.5, the version immediately prior to the current release (WordNet 1.6). The researchers who have worked on WordNet, however, consider it to be a work in progress rather than a finished product, and the various extensions and applications described in this book testify to the ongoing nature of the WordNet project.

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*The development of language processing strategies: A cross-linguistic study between Japanese and English.* Reiko Mazuka. Mahwah, NJ: Erlbaum, 1998. Pp. 156.

One of the most fundamental, yet often neglected, or even paradoxical questions in the field of language acquisition is how children who have not yet acquired

stable grammar can process language and still manage to acquire new grammar. This question is further complicated by cross-linguistic differences, such as how English- and Japanese-speaking children process complex sentences in their respective languages. To answer these two intricate questions, we need to identify cross-linguistically common – possibly universal or quasi-universal – characteristics in terms of the development of language processing strategies. At the same time, we also need to know whether different language processing strategies are used by children who speak different languages. We thus need to take both developmental and cross-linguistic issues into consideration simultaneously.

Whereas many conventional psycholinguistic models of language processing in the past were developed solely on the foundation of English and implicitly assumed that all languages would be processed like English, newly developed models give consideration to cross-linguistic differences. This emerging trend in language processing studies has appeared because there is a growing awareness that, notwithstanding general patterns in language acquisition, there is tremendous variation among children from different linguistic backgrounds. Reiko Mazuka's new book, which is based primarily on her doctoral dissertation, not only represents these innovative and more flexible assumptions incorporating cross-linguistic diversity, but also proposes a unique model of language processing that simultaneously addresses both cross-linguistic and developmental challenges.

In eight chapters, Mazuka presents an unusually unified treatment of the universality of natural language processing strategies across languages, on the one hand, and their universality over development, on the other. Chapter 1 lays out the themes, goals, and procedures of the book. Chapter 2 examines the role of language processing in models of language acquisition. Specifically, Mazuka sheds light on the aforementioned paradox of language acquisition models: that is, models that assume that children can parse a sentence in order to acquire grammar, despite the fact that even adults are sometimes inaccurate in parsing sentences. According to Mazuka:

When adults process a sentence, the parser must access the grammar in order to structurally analyze the input. Even then, the parser is known to break down when it encounters sentences that are grammatical yet difficult to parse (e.g., center-embedded sentences, garden-path sentences). In contrast, children are assumed to have an ability to parse not only every grammatical sentence, but also those that are beyond their current grammar. (p. 11)

Referring to the paradox of conventional language acquisition models in which children are considered to process language in order to acquire grammar without any difficulty, Mazuka thus urges us to reconsider the relationship between parsing and language acquisition in children.

Chapter 3 turns to the challenge of cross-linguistic differences in the field of adult language processing. Here Mazuka focuses on the universality in natural language processing among adults. Many of the basic assumptions of conventional models are derived from English, which is a right-branching (RB), head-initial (HI) language. Mazuka, however, shows that the syntactic properties of left-branching (LB), head-final (HF) languages, such as Japanese, challenge the basic assumptions of such conventional models. For example, the English sen-

tence “John saw Bill” would be arranged as “John Bill saw” in Japanese because the head of the verb phrase “saw” is located at the end of the phrase. Note that in Mazuka’s argument branching direction plays a primary role and head direction is, in many cases, secondary. As a possible solution, Mazuka suggests that we construct a universal model that allows both RB and LB languages to be processed efficiently by differently organized parsers.

In Chapter 4, by linking a grammatical parameter and language processing strategies, Mazuka presents a proposal that attempts to address both developmental and cross-linguistic issues within a single system. One of the most important discussions not only in this chapter but also throughout the book is Mazuka’s emphasis on syntax rather than semantics – particularly the branching direction parameter. According to Chomsky (1965), Universal Grammar is assumed to be basic knowledge about the nature and structure of human language. Chomsky (1985) later hypothesized that children, in their language acquisition process, move from an initial state of language faculty to a steady state, as if by simply flipping a series of switches. This parameter setting is considered to be set at a very early age through prosodic cues; in other words, infants find important clues to the basic configuration of their language in the prosodic characteristics of the speech they hear. This claim by Mazuka is, in fact, based on the prosodic bootstrapping hypothesis (Morgan & Demuth, 1996), which states that children use prosodic cues to learn about structure. By adopting a parametrized parsing approach in the preverbal stage, Mazuka argues, the first question – the paradox of processing sentences to learn grammar – can be easily solved without falling into the pitfall of the developmental paradox.

Chapter 5 reviews and assesses different assumptions, such as: (a) everyone (both children and adults who are speakers of any language) processes language in the same manner; (b) although children and adults process languages in qualitatively different ways, these differences are universal; and (c) the setting of grammatical parameters in language acquisition is connected with a different organization of language processing strategies. Mazuka first evaluates three alternative single-parser approaches that address cross-linguistic diversities between English and Japanese: namely, (a) head-driven approach, which assumes that parsing decisions made word-by-word from left to right in English (an HI language) can be applied to Japanese (an HF language); (b) full-attachment approach, which assumes that the parser makes parsing directions without delay and allows for backtracking and reanalysis when necessary; and (c) minimal commitment approach, which, eliminating the need for a great deal of reanalysis in Japanese, proposes not to make parsing decisions unless the parser is fairly certain that the analysis is correct. However, a generic head-driven parser, for example, cannot account for a lack of processing difficulty with many types of Japanese sentences. The single-parser approach, which assumes that processing strategies are universal over development as well as across languages, thus fails to reflect the very human nature of language processing. The other two approaches, according to Mazuka, have certain shortcomings as well. However, Mazuka argues, because the parametrized parsing approach that she proposes allows different parsing strategies for individual languages, it can address not



only the first question of the process of language acquisition, but also the second question of the cross-linguistic differences.

Chapter 6 introduces experimental studies of language processing with both adults and children. The model that Mazuka advocates predicts that, after the grammatical parameter is set in early childhood (possibly through prosodic cues, as argued in Chapter 4), the same processing strategies continue into adulthood. In other words, Mazuka dismisses models proposing that young children use qualitatively different strategies from adults. The author instead considers continuity in language processing strategies to be a universal aspect. Mazuka's model furthermore addresses cross-linguistically different features of language processing strategies. That is, like English- and Japanese-speaking adults, English- and Japanese-speaking children use different organizations of processing strategies, although children's and adults' strategies parallel each other in a given language.

Chapter 7, which presents new data from four experiments with language processing strategies used by English- and Japanese-speaking children between the ages of 4 and 8, makes up almost one-third of this relatively short monograph. In fairness to the author, it should be mentioned that she tested a fairly large number of children (nearly 50 English-speaking children and over 70 Japanese-speaking children). The results of the English experiments – that young English-speaking children not only process clauses or clause-like units in a similar manner to adults but also process clauses in a serial fashion, as adults do – support the prediction that children's processing strategies are continuous across development. On the other hand, although children's performance improved with age in both English and Japanese, systematic differences in processing were observed between English- and Japanese-speaking children. For instance, whereas English-speaking children demonstrated differential accessibility of main and subordinate clauses (which seems to parallel to the finding for English-speaking adults), Japanese-speaking children did not. Such cross-linguistic differences, according to Mazuka, not only testify to the existence of differences in language processing strategies across languages, but also provide evidence of cross-linguistic differences in grammatical parameter setting, which is connected with Universal Grammar. Chapter 8, which is a concluding chapter, further discusses the data and the theory underlying Mazuka's parametrized parsing model.

Mazuka's book has certain strengths. First, unlike previous models proposing that children's and adults' language processing are qualitatively different (or, more generally, that developmental changes are qualitative), through the experiments in Chapter 7, Mazuka succeeds in identifying continuity in the language processing strategies used by children and adults within a given language. Second, unlike many of the basic assumptions of conventional models, Mazuka develops her model with a full consideration of cross-linguistic diversity. Rather than species-specific characteristics (i.e., universals), as asserted by Chomsky (1965), or person-specific variations (i.e., individual differences), which are often maintained by psychologists, addressing cross-linguistic issues is critical. Mazuka not only attempts to discuss developmental issues but also tries to address cross-linguistic issues as well.

As a Japanese-language researcher, I was particularly interested in Mazuka's

experiment with Japanese-speaking children on their judgments on Japanese clause-initial markers, such as *mosi* “if” and *tatoe* “even if,” which signal at the beginning of clauses that these are subordinate clauses. In Japanese, however, these types of markers are rare; generally, in part because of the nature of a subject-object-verb (or HF) language, the categorization information does not become available until the verb is reached at the end of the clause. Interestingly, the results indicated that *mosi* clauses, which can be initially identified as subordinate clauses, did not differ from those that cannot be identified as such. Mazuka thus argues that the Japanese data do not support the hypothesis that a semantic representation of a clause functions as a segmentation unit in processing. Instead, according to the author, the data suggest the importance of the syntactic clause as the processing unit.

Mazuka’s book also has some weaknesses. First, Mazuka does not appear to have tested Japanese-speaking adults. On the grounds that English-speaking children and adults show qualitatively similar processing, she naively assumes that this continuity will also hold between Japanese-speaking children and adults. Her assumption of continuity between adults and children, as far as Japanese is concerned, is candid but, unfortunately, unwarranted. Second, despite a seemingly promising introduction of the use of prosodic cues for parameter setting in Chapter 4, Mazuka does not develop this discussion further. If she had elaborated on how prosodic characteristics contribute to language learning, the book would have been more interesting. Third, the book has some typographical errors, which can be very distracting to the reader.

Despite such shortcomings, which could hinder the reader’s comprehension of the author’s discussion, overall Mazuka has succeeded in presenting a promising view of her language processing model by linking a branching direction parameter in Universal Grammar with a differential organization of parsing strategies for LB and RB languages. The author’s explanations are sometimes too repetitive in this relatively short book (although it might have been difficult to understand such technical material otherwise). Partly because of the redundancy, however, her intentions and goals are clear throughout. The book successfully conveys the importance of accounting for both developmental issues (e.g., a universal aspect of continuity within a language) and cross-linguistic differences.

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