ideas in his book *practical Criticism* did much to improve those dismal classes that proffer literature to native speakers, but it is obvious how naturally Richards' methodology meets the needs of the ESL student, and it is his principles which are developed and applied by the editors of this valuable collection. A close and attentive reading for meaning can teach many skills, above all the ability to disentangle ideas from prose and to express them in appropriate language. The underlying problem, too seldom recognized, is that literature is not only something other than ordinary writing, it does not readily lend itself to simplistic exercises. As Brumfit puts it, "we are not using literature simply as a servant of language." To use but not to use, that is the question for teachers, and they gain explicit support and guidance from these essays. At the level of generalization, S.J. Burke somewhat pedantically but usefully lists all the tasks that literature might perform, and the list is valuable for its extent, ranging from literacy to "humanitarian attitudes." It sounds grandiose but one would not wish to contradict. Literature can be "all things to all men" and perform a multitude of linguistic services in the classroom. Sandra McKay chooses to be more specific, and perhaps more openly practical, when, in a more pedagogic mode, she distinguishes between level of usage and level of use and suggests that both may be advanced by the reading of liteature.

In addition, several essays deal with teaching in Africa. It is obvious that this geographical interest derives from the editors' particular personal experience on that continent, yet, although the conditions there are unique, they offer the kind of valuable generalizations that can only come from actual classrooms. In a related vein, Braj Kachru touches on an increasingly important issue: the development of new literatures in English as a second language (of which Africa and India are the most productive) and suggests the role that ESL literature should play in the ESL curriculum. This is an area that has barely been considered internationally, though such writing is increasingly incorporated in teaching within the countries of the various authors.

To me this is not a challenging book because it says all the things I have tried to preach for years, but it sustains my opinions with intelligent, specific reference and often ardent prose. It is hard to know whether this book would convince the die-hard who dismiss literature as an element marginal to language teaching. It does most certainly provide ammunition to the convinced and partly

convinced that would justify their often tentative experiments by reference to the judgment of people as distinguished as Michael Long, Christopher Candlin and H.G. Widdowson. With those on one's side, who is to fear? The book certainly ought to be read by everyone in the profession. From it teachers will acquire not only the assurance of a sustaining philosophy that justifies their decisions to incorporate literature in their program but also most specific guidance about how to do it efficiently. The book is written by people who know and respect literature so that not even the most arrogant critical specialist can condemn them as being superficial in their perception or deficient in their judgments. At the same time, it does accept that, in the ESL context, literature must be made useful, and it explains how that can be accomplished. If it reaches only into the hands of those already tempted to explore, it will even then constitute the beginnings of a very necessary revolution in the classroom, and how grateful learners would be for this.

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Contemporary Linguistics: An Introduction by William O'Grady, Michael Dobrovolsky and Mark Aronoff. New York: St. Martin's Press, 1989. 490 pp. Adapted from *Contemporary Linguistic Analysis,* published in Canada by Copp Clark Pitman, Ltd.

Reviewed by
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Contemporary Linguistics surely deserves its title for a number of reasons. First, it is based not only on theoretical expertise but also on the experience of authors who have taught

introductory linguistics classes over the years. Secondly, while the rapid progress being made in linguistic theory seems to make it fairly difficult for any one volume to adequately cover all the areas of current research, particularly at the introductory level, the authors of *Contemporary Linguistics* have set this as their goal, and their effort is highly commendable, from the comprehensive selection of materials to the way they make difficult concepts accessible to neophyte readers.

With a total of 15 chapters, the book can be divided into the following major sections: Chapter 1 - language and the need for its analysis; Chapter 2 to 6 - various aspects of mainstream linguistic analysis; Chapter 7 to 8 - historical and comparative methods; Chapter 9 to 11 - psycholinguistics and applied linguistics; Chapter 12 to 13 - sociolinguistics; Chapter 14 - animal communication; Chapter 15 - computational linguistics. Following Chapter 15 is a comprehensive glossary with concise, up-to-date definitions of important linguistic terms. The information in the glossary, combined with the specific references in the general index, allows readers easy access to numerous topics. The book also includes a language index.

Most of the book's sections, especially the chapters on phonology and syntax, cover current issues which could not have appeared in introductory linguistics texts published prior to *Contemporary Linguistics*. Such topics include the new areas of syllable structure (pp. 70-85) and wh-movement (pp. 151-165), for example.

Chapters 11 and 15 are particularly significant for their detailed discussion of language-related disciplines which other introductory linguistics texts seem not to have given enough coverage until now. In Chapter 11, the authors show how second language (L2) acquisition differs from the learning of a first language (L1). The literature on the issue of age in L2 acquisition is reviewed in the first part of the chapter, while the second part discusses the effects of the L1 model (e.g., teacher or native speaker) and the environment on the L2 learner. The various stages in the acquisition of English as a second language are then discussed. The next sub-section, on two major approaches to L2 acquisition research -- contrastive analysis and error analysis, is followed by a discussion of language learning strategies which may involve conscious or subconscious processes. The discussion of the cognitive aspects of L2 acquisition outlines the possible effects of aptitude, motivation, attitude and empathy. The final sub-section in this chapter summarizes various language teaching methodologies and considers what the choice of a particular method means to the teacher. *Contemporary Linguistics* certainly stands apart from other similar texts in its overview of second language learning and second language pedagogy.

Chapter 15, titled "Computational Linguistics," deals with the role of computers as a tool in linguistic analysis and outlines how the fields of phonetics, phonology, morphology, syntax, lexicology, semantics and pragmatics have benefitted from the use of computers. The chapter also discusses how computers have been involved in the creation of systems which use linguistic information to enhance such language tasks as translation and text generation. Like the chapter on second language acquisition, Chapter 15 provides readers with more up-to-date information on an expanding field of inquiry than any other introductory linguistics text.

Now to a number of minor weak points in *Contemporary Linguistics*. First, although an introductory course in linguistics should mention discourse structure theory and text analysis, these are missing from the book. Chapter 12 deals with socio-cultural aspects of language and language use, but there is no mention of text-internal phenomena, such as cohesion, coherence, reference and schema (cf., Yule, 1985, pp. 104-114) or of research on spoken discourse. Surely even beginning readers need to know how the tools of linguistic analysis could be effectively used beyond the level of the sentence.

The second issue is whether an American adaptation of the Canadian edition is really worth the effort, given that the generative approach (which the authors claim to have adopted in the Canadian edition) is not marked by such distinctions of nationality. The authors should have perhaps told us exactly what difference it makes to linguistic (generative) theory, wherever it is practiced in the world, whether language examples are drawn from Canada, America or elsewhere.

Another technical problem has to do with the listing of names, such as Videa P. Guzman, Daniel Finer and others, under various topics in the table of contents without including any further information as to who they are and exactly how they contributed to the book. If they did not actually write particular chapters, what was their precise role in the compilation of the materials?

As an introductory linguistics text, one expects the goal of *Contemporary Linguistics* to be to get people started in the field of linguistics and related disciplines. In spite of a few minor problems, the authors have not only achieved this goal in a more-than-adequate fashion, they have also demonstrated that an introductory text can be comprehensive enough for the non-initiated to become acquainted with the complexities which the study of language entails. For the practicing linguist, *Contemporary Linguistics* could be a good reference source. For the linguistics teacher, it should serve as an excellent course text. For the student, it is particularly helpful because of the straightforward, explanatory style the authors have adopted. In all, *Contemporary Linguistics* fills a major gap, since state-of-the-art introductory linguistics texts are not plentiful on the market.

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Microcognition by Andy Clark. Cambridge, MA: MIT Press, 1989. 226 pp.

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In the true spirit of integrative, interdisciplinary cognitive science research, philosopher Andy Clark seeks to call a truce to what he aptly refers to as the "holy war" of cognitive modeling. In complex matters of the mind, it is Clark's contention that since the brain may simply need and use more than one mode of information-

processing to perform such tasks as comprehending and producing human language, a more integrative theory of cognition is therefore needed. In *Microcognition*, Clark introduces the reader to some of the major issues and conundrums of 20th-century philosophy and cognitive science: What is the mind, and what is its relationship to the brain? How does the mind work, and how does it affect behavior? How do seemingly abstract entities, such as personal beliefs and desires, influence bodily movement, and how might sentential propositions actually be instantiated in "neural stuff?" Clark gives us a quick overview of the modern answer to the mind/body dilemma: the computational model of mind. Most interestingly, he brings us into the heart of the currently lively debate between two competing computer models of the mind: the "classical" symbol systems of AI (Artificial Intelligence) and the "new connectionist movement," also known as PDP (Parallel Distributed Processing).

This new debate in cognitive science is reminiscent of the heated discussions between Chomsky and the behaviorists some 30 years ago. One central issue, now as then, concerns the systematicity of thought and language and the explanatory adequacy of a generative grammar for language, as opposed to a 'subsymbolic,' or associationist, view of both cognition and language. The symbolic computational approach of classical AI, in fact, represents the mathematical-syntactic approach of Chomskian generative grammar *par excellence*, since it conceptualizes the mind as a type of formal logic machine with mental rules operating on abstract, symbolic representations. The subsymbolic connectionist approach, on the other hand, operates without rules and without symbols. It emphasizes the "messy, biological" substrate of cognition, rather than the rational, logical nature of thinking, and uses a computational architecture closer to the distributed, parallel nature of processing in the brain, rather than the conventional sequential architecture of a digital computer. Clark's thesis is that cognitive modeling may actually require both classical and connectionist 'cognitive architecture' to model two different kinds of information processing: for some tasks, our thinking does appear to be slow, deliberate and serial, while for others, such as visual perception, it is fast, automatic and parallel.

Microcognition is divided into two parts: the "mind's-eye view," which describes classical AI and some of the philosophical criticisms against it, and the "brain's-eye view," which focuses on