

FOREWORD

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ARAL XVI RATIONALE

This volume, for the first time in the *Annual Review of Applied Linguistics* series, examines the relationship between technology and language as a major theme. Apart from an occasional article on Computer Assisted Language Learning (CALL) and technology over the past fifteen years (one article in volumes I, V, and VII), no previous volume in the series has emphasized the various roles that technology plays in our uses of language, our analyses of language itself, or our applications of technology in language instruction.

It is time, if not past time, to recognize the growing integration of technology with all areas of language knowledge and application, as well as the many ways in which technology will affect the ongoing work of applied linguists everywhere. This volume, then, not only reviews recent research and practice in technology and language, but also looks forward and explores the varied ways that technology is now having an impact on our profession, as well as the increasing influence that technology will have in the coming decade.

In some respects, the future is rapidly advancing upon us whether we are ready for it or not. In the field of applied linguistics, in particular, computer applications and interactions within various sub-domains of specialization will soon be a part of the knowledge and skills demanded of all practicing applied linguists: What was once the domain of the specialist will soon become one of the standards of basic training by which any applied linguist will be evaluated. And there can be no turning back. If there is a consistent theme running throughout the various contributions, it is the integration of computer technologies with the human user as analyst and as learner. Those of us who will be training future applied linguists must recognize, and prepare for, this emerging reality. The present volume suggests ways in which we can become more prepared.

The volume is divided into three sections, each providing a distinct perspective on the relation between language and technology. The first section explores the evolving relationship between language and technology, addressing the major technologies that have influenced language form and language uses from the past to the present day. In particular, this section examines the evolving uses of literacy for society and for individual cognition, focusing on writing, printing, computers, and telecommunications as enabling technologies.

The second section focuses specifically on the ways that current technology supports the analysis of language. The first two chapters address the well-known and important topics of natural language processing and machine translation. A major theme to arise from these chapters is the ways that technology is used to support language research rather than to provide automated solutions. The final two chapters of this section focus on a relatively new connection between technology and language—the integration of technology and corpus linguistics that offers new perspectives on linguistic analyses.

The third and final section examines ways in which technology supports applied linguistics concerns related to language learning. The first two chapters address CALL from two slightly different orientations: English as a Second Language (ESL) and Foreign Language Learning (FLL). While this distinction (imposed by the editor) is somewhat artificial, since CALL research informs both fields, it ensures that discussions of software and instructional applications would complement each other, rather than overlap, across the two contributions. The final four chapters of this section highlight the applications of many technologies to support instruction and assessment. In particular, the chapters emphasize the exploration of corpora for language instruction, the potential of the Internet for instructional uses, the role of the computer and telecommunications for distance learning, and the uses of technology to provide more valid and reliable language assessment.

The editing of this volume has also driven home for me, even if only in a small way, the emerging connections between technology and language. World Wide Web (WWW) addresses and e-mail addresses require new formatting conventions for text citation and bibliographic reference; they must be able to stand out clearly, and the format cannot include any final punctuation, such as the period, which could be taken as part of the address. In addition, information on the WWW is cited in chapter texts and bibliographies, and the notion of “date of publication” becomes somewhat irrelevant in certain cases. Since much of the information on the Internet can be readily and regularly updated, the emphasis is on currency rather than first appearance of the information (except for conference archiving and electronic journal functions).

While the editing issues noted above are relatively minor consequences of technological changes, one can well imagine the exponential expansion of such minor changes to generate new language functions, discourse genres, information configurations, and patterns of interaction. As will become clear from the chapters in this volume, the impact of technology on mainstream applied concerns such as language learning, language teaching, language testing, and language policy and planning will be stunning.

If one can be pardoned for a mangled cliché, it will be a new world for applied linguists, and it will belong to the intellectually brave and academically well-prepared. What these “brave new world” leaders will do with this set of opportunities also raises many important questions which take us beyond the immediate scope of the present volume, though they are questions which applied linguists cannot afford to ignore.

PROCEDURAL NOTES

Since the *ARAL* series is, in part, meant to be a research reference tool, the following procedural notes are intended as a guide. All bibliographic entries follow the basic format of the Linguistic Society of America (LSA), although a somewhat unique citation form has emerged for the *ARAL* series. With respect to internal citation, the two types of bibliographies—*annotated* and *unannotated*—should be viewed as integrated, so that in instances where there is more than one entry for a given author for a particular year (e.g., 1990a; 1990b), it is possible that either of the entries may occur in either of the bibliographies; that is, 1990a may be in the annotated bibliography while 1990b may be in the unannotated bibliography, or vice versa. No items are duplicated between the two separate bibliographic lists; that is, the item identified as 1990a will *not* occur in both the annotated and the unannotated bibliography. Both types of bibliography—annotated and unannotated—are arranged in strict alphabetical order by the last name of the first author; that is, all the works *authored* by a particular individual will appear before all the works *edited* by the same author, and both of those entry types will precede works co-authored or co-edited by that same author (or set of authors). Repeated authors are indicated by the use of a solid line [_____] of the same length as the name (or names) it replaces. Sources that include cited articles may not necessarily be represented in either bibliographic list if they are not in general germane to the particular area under discussion; in general, belletristic works cited as examples (or for more literary purposes) are not included in either bibliographic list, though they are identified in detail in the article in which they occur. In all texts contributed to the *ARAL* series, an editorial effort has been made to conform generally to the usages and spellings common in the United States. Where possible, English translations of all non-English sources are provided. All contributed papers have been composed specifically for publication in the *ARAL* series and have not (unless otherwise

specifically noted) appeared elsewhere previously, although their contents may have been used in whole or in part in oral presentations by the author(s).

The Editorial Directors do not assume responsibility for the positions taken by contributors. Contributions often involve issues of policy as well as more clearly language-related issues. The Editorial Directors wish to be held blameless for opinions and errors of fact expressed by any contributor. The Editor apologizes in advance for any editorial errors that may have crept into the texts and accepts full responsibility for any such editorial errors, but not for substantive errors which are the sole responsibility of each contributor. Bibliographies are prepared and submitted by the contributors; the Editor makes every effort to assure the accuracy of each bibliographic entry that appears in every volume of *ARAL*, but in the case of materials not readily available through libraries or other bibliographic sources in the United States, the Editor is dependent upon the accuracy of material submitted by the contributors. In some few instances, inclusive pages for cited articles, which originally appeared in anthologies or collections, are not given; such omissions occur only when the original source is not available to the Editor and/or when the contributor has not supplied the appropriate pagination. In materials listed in well-known storage and retrieval networks like ERIC and the British Council's ELT Documents, reference numbers are also provided; when titles available only through electronic data bases are cited, every effort is made to provide an accession number (e.g., ERIC files).

This sixteenth volume of *ARAL* continues the practice, first established in the third volume, of including a running index of authors cited and topics covered in previous issues of *ARAL*. However, this list became so large that it has become necessary to eliminate the listings from the earliest volumes. Thus, Volume 6 included a cumulative bibliography of Volumes 1 through 5; beginning with Volume 7 as each new year is added, the oldest year's citations have been dropped from the list. In this issue (Volume 16), the cumulative citation listing will include citations from Volumes 11 through 15. Beginning with Volume 5, a Contributor Index was added to the series; in each issue, previous contributors to *ARAL* are indexed in a single alphabetical list. With the *ARAL* series now in its second decade, the Contributor Index lists articles appearing in the previous ten years (Volume 6 through Volume 15). There is also a Subject Index.

The indices are presented separately—an *Author Index*, a *Subject Index*, and a *Contributor Index*—at the end of each volume. The Author Index cites every item that has appeared in the bibliographies accompanying each article. Each author citation is accompanied by one or more Roman numerals and Arabic numbers (e.g., Sharp, D. X/120). The Roman numeral represents the number of the *ARAL* volume in which the author is cited, and the Arabic number represents the page(s) in that volume in which the citation occurs. Thus, X/120 means that Sharp is cited in *ARAL* X (the volume published in 1990). Multiple sets of numbers (e.g., Bazerman, C. X/156; XI/72, XI/82, aXI/109) mean that the

author is cited in more than one place. The prefixed lower case 'a' (e.g., in aXI/109) indicates that the citation occurs in an annotated bibliography. Unmarked cases occur in unannotated bibliographies. U.S. government publications, court decisions, and public laws are listed separately at the end of the Author Index. To the extent that *ARAL* may be said to represent the field accurately, the Author Index may be used as a citation index and be a supporting criterion for merit and promotion evaluation in U.S. institutions.

The Subject Index provides the traditional alphabetical list of topics covered, giving inclusive pages by volume for the point at which the discussion occurs (e.g., X/274–276); this entry indicates that the subject is covered on pp. 274–276 in Volume X. Multiple number sets (e.g., Variationist sociolinguistics: V/48–53; XI/3–16) indicate that the subject (*variationist sociolinguistics*, in this case) is discussed in two places in the series, once in Volume V on pp. 48–53, and again in Volume XI on pp. 3–16.

The Contributor Index provides a traditional alphabetical listing of all contributors to the *ARAL* series for the previous ten years. The citation includes the complete title of the contribution as well as the name of the contributor. Each entry, as in the other indices, carries two designations (e.g., X/163); the first number designates the volume in which the contribution occurs (in this case Volume X), and the second number indicates the page in that volume on which the contribution begins.

It is the intent of the Editor to continue the several indices in future volumes of this series. It has been suggested that a complete bibliography of all works cited in *ARAL* might constitute a useful contribution to the field; such a bibliography, published as a separate volume, would both offer a compendium of works considered important enough to cite by authors who are, presumably, experts in the various sub-fields of applied linguistics, and serve as the beginning of a citation index for the field. There are, obviously, a number of problems in compiling such a bibliography, since items listed as “in press” or “forthcoming,” which have subsequently been published, would need to be corrected, inclusive pages would need to be added, and items which have never appeared would have to be cited in a modified format. This is a massive undertaking. The Editorial Directors seek the views of scholars in the field. Comments would be welcome on the desirability of compiling such a bibliography.

ACKNOWLEDGEMENTS

As Editor, I would like to thank the other members of the Editorial Board for their advice and assistance. I would also like to acknowledge the suggestions and comments offered by members of the Advisory Board. They serve as a very important resource for planning and for the nomination of *ARAL* contributors.

Closer to home, I would like to thank my Editorial Assistant, Beth Yule, for all the extra time and effort that is required to keep *ARAL* running smoothly. It would not be possible for me to produce *ARAL* without her, and she manages to keep her sense of humor throughout the entire process. I would like to thank Angela Barker and Joy Janzen for proofreading the manuscript and pointing out many editorial matters which I had overlooked. I would also like to thank Maureen McGee for computer consultation, for editorial assistance, and for putting the final copy through a page layout program. Finally, I would like to acknowledge the support and assistance of the Cambridge University Press, as well as the Department of English and the College of Arts and Sciences at Northern Arizona University, which have provided the Editor with the basic facilities and have absorbed some of the incidental costs associated with the production of this volume.

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Flagstaff, Arizona
December 1995