# FROM THE EDITORS

To continue with our special millennial issues on "The Role of Computer Technology in Second Language Acquisition Research," we are delighted to introduce four additional articles which highlight the potential of technology, not only to enhance language learning, but also to facilitate research on language acquisition.

The first article by Volker Hegelheimer and Carol Chapelle, "Methodological Issues in Research on Learner-Computer Interactions in CALL," deals with an example of how CALL materials can be used both to implement theoretically-ideal conditions for SLA as well as to conduct empirical research to investigate effects of these conditions. Specifically, the authors describe a study of on-line noticing of vocabulary using CALL materials which gather data on noticing, test retention of word meaning, and calculate the correlation between noticed and remembered words. They provide insight into the issue of which glosses learners actually use and whether their use correlates with vocabulary retention.

The second article by Peter Groot, "Computer-Assisted Second Language Vocabulary Acquisition" describes a computer-assisted word acquisition program (CAVOCA) whose development was based on an attempt to operationalize theoretical ideas about word acquisition, that is, the way the mental lexicon is structured and operates. Experimental studies were conducted comparing two methods of learning new words, the first using bilingual lists and the second using the CAVOCA program. Findings provide a first indication that intensive processing of new words, as provided, for example, in the CAVOCA program, may lead to better long term retention than superficial processing of the words out of context, as in bilingual lists. However, the author concludes that a combination of the two methods may be advisable and that instruments like CAVOCA may help provide data to this end.

The third and fourth articles both describe studies on CMC (computer-mediated communication). Susana Sotillo's article "Discourse Functions and Syntactic Complexity in Synchronous and Asynchronous Communication" describes her findings that the quantity and types of discourse functions present in synchronous CMC discussions are similar to the types of interactional modifications found in face-to-face conversations which are deemed necessary for second language acquisition. Discourse functions in asynchronous discussions are found to be more constrained than those found in synchronous discussions. She concludes that CMC technologies have the potential to enhance the process of SLA and encourage the formation of electronic communities of learning.

Robert Blake's article "Computer Mediated Communication: A window on L2 Spanish interlanguage" investigates the use of CMC to study how learners negotiate meaning and, more generally, to provide the SLA field with a "window" through which to observe L2 interlanguage as it is unfolding. He finds that well-designed networked tasks allow learners to notice the gaps in their lexical interlanguage and that certain tasks, such as jigsaw tasks, prove superior to other types of tasks, such as information gap, decision-making, or opinion tasks, in fostering negotiation in cases of lexical confusion. These tasks appear to constitute ideal conditions for SLA, as networked exchanges also heighten learners' metalinguistic awareness of their own vocabulary development.

Please visit the columns in the current issue. "On the Net" presents Jean LeLoup and Robert Ponterio's description of The Perseus Project, a remarkable exploration of Greek,

Latin, and the ancient classical world. In "Emerging Technologies," Bob Godwin-Jones reports on the topic of Web Browser Trends and Technologies.

This volume features two books reviews: (1) *Teaching and Learning at a Distance: Foundations of Distance Education* by M. Simonson, S. Smaldino, M. Albright, & S. Zvacek, a book for everyone interested in or involved in distance education; and (2) Language Teaching and Language Technology, a selection of papers presented at a conference at theUniversity of Groningen in 1997 and mostly devoted to a discussion of technological features of intelligent CALL.

Our software review section offers readers comprehensive reviews of two software programs: (1) *Conexiones,* an Interactive CD-ROM software package to accompany Conexiones: ComunicaciÛn y cultura (Zayas-Baz·n, Bacon, & GarcÌa, 1999), a university level, intermediate Spanish textbook; and (2) *Dans un quartier de Paris,* a CD-ROM package for learners of French which links language, literature, history, culture, and art and which may be used as a stand-alone program or as part of a course.

We look forward to extended and continued dialogue on these issues of how second language acquisition research can be furthered by technologies such as CMC and the CALL materials described above. We welcome your future submissions!

Dorothy Chun, Mark Warschauer, and
Irene Thompson, Editors