

ScienceDirect

Speech Communication 52 (2010) 863



www.elsevier.com/locate/specom

Preface

Adverse listening conditions always make the perception of speech harder, but their deleterious effect is far greater if the speech we are trying to understand is in a non-native language. An imperfect signal can be coped with by recourse to the extensive knowledge one has of a native language, and imperfect knowledge of a non-native language can still support useful communication when speech signals are high-quality. But the combination of imperfect signal and imperfect knowledge leads rapidly to communication breakdown.

This phenomenon is undoubtedly well known to every reader of Speech Communication from personal experience. Many readers will also have a professional interest in explaining, or remedying, the problems it produces. The journal's readership being a decidedly interdisciplinary one, this interest will involve quite varied scientific approaches, including (but not limited to) modelling the interaction of first and second language vocabularies and phonemic repertoires, developing targeted listening training for language learners, and redesigning the acoustics of classrooms and conference halls. In other words, the phenomenon that this special issue deals with is a wellknown one, that raises important scientific and practical questions across a range of speech communication disciplines, and Speech Communication is arguably the ideal vehicle for presentation of such a breadth of approaches in a single volume.

The call for papers for this issue elicited a large number of submissions from across the full range of the journal's interdisciplinary scope, requiring the guest editors to apply very strict criteria to the final selection. Perhaps unique in the history of treatments of this topic is the combination represented by the guest editors for this issue: a phonetician whose primary research interest is in second-language speech (MLGL), an engineer whose primary research field is the acoustics of masking in speech processing (MC), and a psychologist whose primary research topic is the recognition of spoken words (AC). In the opening article of the issue, these three authors together review the existing literature on listening to second-language speech under adverse conditions, bringing together these differing perspectives for the first time in a single contribution. The introductory review is followed by 13 new experimental reports of phonetic, acoustic and psychological studies of the topic.

The guest editors thank *Speech Communication* editor Marc Swerts and the journal's team at Elsevier, as well as all the reviewers who devoted time and expert efforts to perfecting the contributions to this issue.

Anne Cutler Martin Cooke M. Luisa Garcia Lecumberri