Preface

For reasons touched upon later in this volume, the subject of Machine Translation (MT) was long considered taboo in the U.S., though this was not the case elsewhere. However, a number of factors - including the technical success of the LRC MT system (METAL) being developed at the University of Texas - led to the recent awakening of interest in MT in the U.S., and in the summer of 1983 to my being asked to present the closing address at the 10th International Conference on Computational Linguistics (COLING), held at Stanford University in July, 1984. The resulting survey paper, though controversial (in the U.S.), was well received.

Out of this opportunity evolved a request for me to edit a special issue of the journal *Computational Linguistics,* to be devoted to MT and, the Editorial Board permitting, to include my COLING paper. So it was that in 1985, Issues 1-3 of Volume 11 presented a collection of papers on MT by most of the active non-commercial principals in the field. Requests for reprints have been voluminous, and at the 1986 COLING in Bonn these back-issues were in greatest demand at the ACL booth. This book is a collection of all but one of those papers - the fast-paced EUROTRA project's paper having been withdrawn because too many of its technical details were outdated. Minor revisions of the original papers from the other, more mature development projects have been sufficient to bring them up to date. The restricted MT bibliography that I compiled in early 1984, and included as a separate item in the journal, has also been updated to reflect some of the most recent literature.

I hope that this volume both illustrates and stimulates the growing interest in MT around the world, and especially in the U.S., where knowledge of the state of the art in MT (to say nothing of translation in general) is still generally lacking despite the recent trend toward increased awareness. Irrespective of academic arguments regarding the definition and feasibility of MT, the papers herein demonstrate that MT systems have succeeded in increasing translation productivity for many years, and that progress continues. MT remains one of

the very few areas in the practice of Natural Language Processing where the relative successes or failures of systems have been measured in objective, even commercial, terms. Regarding NLP theory, high-quality translation is certainly one of the most challenging possible tests, and MT therefore offers a rich matrix for continued exploration and experimentation.

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I also wish to thank the authors who labored to proof-read their papers one last time, and in some cases composed short but significant updates. But, most of all, I wish to thank Barbara Smith, who devoted herself to the electronic transcription of a number of the papers herein, to redrawing most of the figures and tables, to formatting and producing the camera-ready version of this volume, and to proof-reading it in its entirety. Without her able assistance and expertise, any results of my consequent solo efforts would not be nearly so pleasing or effective.

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