

Appendix: **Three historical notes**

G. Richard Tucker

Center for Applied Linguistics

Michael Zarechnak

Georgetown University

Given the commemorative character of this Bicentennial year and the fact that the *Georgetown University Round Table on Languages and Linguistics 1989* marks anniversaries of the Center for Applied Linguistics, the Georgetown University-IBM Machine Translation Project, the Georgetown University School of Languages and Linguistics, and the Round Table itself, these three historical notes may be of interest.

The Center for Applied Linguistics. The Center for Applied Linguistics (CAL) began operation on Monday, February 16, 1959. Participants at a conference held in 1958 at the University of Michigan had concluded that there was a need for an organization which could address certain language problems that, in the late 1950s, were becoming increasingly urgent: for example, the problem of how to meet the rapidly increasing demand for the teaching of English abroad; the problem of training enough Americans in the major languages of Asia to overcome the serious Asian-American language barrier, and the problems faced by many speakers of so-called nonstandard versions of English in the United States—to name a few. Thus, to address these problems and challenges, CAL was begun initially with funding from the Ford Foundation, and for administrative purposes, lodged under the umbrella of the Modern Language Association.

Since its inception, CAL has had four Directors: Charles Ferguson of Stanford University (who is with us here at *GURT*), John Lotz, Rudolph Troike, and currently Richard Tucker.

Many of the activities and emphases begun by Charles Ferguson continue to this day—namely, a commitment to the systematic collection and dissemination of research results and other information intended to improve educational practice (in this regard, for example, CAL has operated the ERIC Clearinghouse on Languages and Linguistics for more than 20 years); special attention to problems of the teaching and study of the less commonly taught languages (CAL continues to maintain probably the most extensive database of this kind in the world, with information about the teaching of more than 1,000 of the world's languages); and attention to the description of what we now refer to as nonmainstream varieties of language (e.g. Black Vernacular English, Puerto Rican English, Native American English, Vietnamese English, etc.). It was also during these years that CAL staff collaborated with other international universities and organizations to conduct a series of national language surveys such as the five-country survey of language use and language

teaching in East Africa. During this time, CAL also participated with four other organizations in the planning meetings which led to the formation of TESOL.

Under the leadership of John Lotz, attention was turned to expanding contacts with linguists and language educators in Eastern Europe and a series of collaborative projects were begun which resulted in the publication of contrastive analyses resulting from work with colleagues in Hungary, Poland, Roumania and Yugoslavia.

Upon assuming the directorship in 1973, Rudy Troike turned CAL's attention to two newly emerging critical sets of issues—namely, meeting the educational needs of language-minority, limited-English proficient, youngsters here in the United States; and near the end of his tenure, with the fall of Saigon, marshalling CAL's resources to help meet the needs of American educators and social service providers who would be called upon to assist the waves of Indochinese refugees soon to be arriving. Toward this first goal, CAL staff worked for many months to help the San Francisco Unified School District develop a compliance plan in response to the *Lau vs. Nichols* Supreme Court decision. With respect to the second goal, CAL initially through its National Indochinese Clearinghouse and Technical Assistance Center and more recently through its Refugee Service Center has played and continues to play a major role in providing information and meeting the needs of such newcomers.

During the past several years under Dick Tucker, CAL has become increasingly concerned with issues related to workplace communication (e.g. addressing the literacy, numeracy, problem-solving and decision-making skills of the workforce of tomorrow); has worked to facilitate full and effective participation by language-minority individuals in science and mathematics education; and has worked together with JNCL and other organizations to develop what Dick Tucker referred to in a presentation at *GURT 1985* as a language competent American society.

—G. Richard Tucker

GU-IBM Machine Translation Project. It was 35 years ago, on January 7, 1954, when the results of the GU-IBM experiment were announced in New York. The announcement was given wide publicity in the press and it elicited a wealth of comments from all quarters. Some people were astonished that machine translation was possible at all. Some people were disappointed that the quality of the translation was far from polished English prose. But those who understood the difficulties of machine translation realized that a definite and decisive first step had been taken along a road that still wound far ahead before the final goal of acceptable machine translation could be reached.

Early in 1956 the Soviet Union announced a successful translation of English into Russian. They acknowledged the relationship between their undertaking and the GU-IBM experiment. In June 1956, GU received a substantial grant from the National Science Foundation to undertake intensive research for the translation of Russian scientific texts into English.

The General Analysis Techniques (GAT) group headed by Michael Zarechnak proceeded in the research one sentence at a time. In this approach each sentence is analyzed into translation units whose presence, absence, and positional relationships to each other are all important. The analysis is carried

out at every possible level that will elicit useful information. Word formation (morphology) is the first level and includes word collocation (idiom). Word grouping (syntagmatic processes) is the second level. This includes the agreement of adjectives with nouns, the government of nouns by verbs, or other form-classes, and the modification of adjectives, verbs and other adverbs by adverbs. The organization of word groups into sentences (major syntax) is the third level. This is specifically the relationship of subject to predicate. The possibility that there are other levels is not precluded.

In the 1960s machine translation (MT) was primarily the concern of the university linguists and computer engineers. The dramatic miniaturization and the increasing sophistication of high technology have changed the picture in the 1980s. The research procedures characteristic of GAT were further developed by other MT systems in both pragmatic terms such as PAHO and theoretical such as Eurotra. Soviet systems include AMPAR, NERPA, FRAP. Japanese MT projects too are now part of larger research efforts.

All these various types of MT systems have their own various places and functions. The MT field itself is a mixture of practice and research. Experimental systems test new ideas both on large-scale computers and microcomputers. The AI methods, new parsers, logico-semantic representations are entering the field via the well-tested methods developed for MT in the past.

After a decade of disenchantment with the idea of useable machine translation, resulting to a large degree from the ALPAC Report in 1966, an upsurge in interest in machine translation has been noted recently in many countries, including the United States. The reason for the rebirth of interest in machine translation may be partly due to the progress made in recent years in the utilization of computer technology in various areas of information transfer and word processing which were unknown just a few years ago. In view of the growing volume of foreign documentation on the subject, untranslated but potentially valuable, a return to machine translation may be not only feasible but necessary. A reassessment of the whole machine translation issue is long overdue.

—*Michael Zarechnak*

Georgetown University School of Languages and Linguistics. Born of the desire to provide young men and women with the linguistic and cultural skills necessary for communicating in the modern world, the Institute of Languages and Linguistics was founded in 1949 by the Rev. Edmund A. Walsh, S.J., as part of the School of Foreign Service. Its first Director, Professor Leon Dostert, who was born in France in 1904 and, as a boy during World War I, served as interpreter for the American soldiers, during World War II was the official interpreter to General Giraud and to General Eisenhower, and, after World War II, was Chief of the Language Division of the Nuremberg War Crimes Tribunal. In this capacity, he brought to the world's attention the system which is now known as simultaneous interpretation.

The opening of the Institute drew international attention for two of its major innovations: the multilingual room and the language laboratory. The former permitted simultaneous interpretation in five languages; the latter introduced recent technological and electronic advances such as tape-recorders

Appendix: Three historical notes /411

and other audiovisual aids in the field of language teaching. Later experiments included drill exercises for the laboratory and for language testing. With the aid of IBM, Professor Dostert went on to conduct research on practical machine translation.

In 1950 Professor Dostert launched the annual Georgetown University Round Table on Languages and Linguistics, and subsequently the series of monographs which report on the Round Table each year. Held during Easter break, the first meeting drew so few people, the story goes, that they fit with ease around one table. The number of participants jumped to 144 in 1951 and has increased steadily since then. With between 350 and 500 participants attending the Round Table, scholars, teachers, and students now come from such places as Australia, Great Britain, Canada, France, Finland, West Germany, Brazil, Mexico, Japan, and the USSR, and from all corners of the United States.

The School of Languages and Linguistics, as it is known today, went on to develop Applied Linguistics, which grew out of the earlier conception of the Institute of reinforcing the teaching of languages with research in linguistics. Linkages with government agencies, the armed services, and the foreign service have influenced, from the outset, the teaching of languages at Georgetown University, which is characterized by a strong sense of communicative competence.

Professor Robert Lado, recognized internationally for his major contributions to the field of language testing, succeeded Professor Dostert in 1960, and later became the first dean of the new School of Languages and Linguistics. Professor Lado served as Dean until 1973.

Since 1966, when Professor James E. Alatis became Associate Dean, after a career in federal service at the Department of State and the U.S. Office of Education, and later after he assumed the deanship of the School in 1973, he has maintained the same traditions and promoted intercultural and interdisciplinary studies. Research on the interaction of linguistics, language teaching, and technology is still a major focus of the School.

The School of Languages and Linguistics has nine departments: Linguistics, Arabic, Chinese and Japanese, French, German, Italian, Portuguese, Russian, and Spanish, and three divisions: the American Language Institute, English as a Foreign Language, and Interpretation and Translation. Since 1973 the unified Department of Linguistics distinguishes four graduate programs: Applied, Computational, Theoretical, and Sociolinguistics. Its graduate program is the largest in the University.

The School is also the administrative home for the Georgetown University Press which each year publishes the proceedings of the GURT, as well as many other works on language, literature, and linguistics, along with other scholarly volumes in such fields as ethics, philosophy, and theology.

From modest beginnings the Round Table has flourished, examining issues in sociolinguistics, bilingual education, second language teaching, world Englishes, and language in public life. The emphasis of the 1989 Round Table is language teaching, testing, and technology and, in many ways, reflects the dreams and aspirations of the pioneers of Languages and Linguistics at Georgetown.