

MASSACHUSETTS INSTITUTE OF TECHNOLOGY PRESENTATION

sentences at random. He explained that the program was text-oriented, that he had used a childrens book, Engineer Small, which, with its forty word vocabulary, was understandably limited. The product result is output without initial input.

Dr. Yngve concluded with an invitation for open discussion. He also invited all interested conferees to gather in the conference room, Tuesday evening at 8:30, for an informal discussion and explanation of COMIT.

BERKELEY PRESENTATION

Tuesday, 19 July, 2:00-3:15 p.m.

LAMB

Professor Lamb began his presentation by taking an arbitrary and discontinuous Russian sentence plus a good translation of it. Placing it on the blackboard, he proceeded to work out a lexeme by lexeme assignment of the translation. He offered as his main topic for discussion: the idea of using lexemes in a translation system. This topic, he added, could be placed under the heading of "helpful concepts and ideas", as had been suggested in the invitation letters in the way of recommendations for conference presentations.

Professor Lamb next invited the conference participants to look at the Berkeley handout material that he had distributed earlier, as he proceeded to discuss the individual items. First, he explained his Diagram of the Structure of a Translation System and discussed the Types of Relationships Between Levels. He made a point of emphasizing the fact that the advantage of this linguistic system was its simplicity.

BERKELEY PRESENTATION

To continue, he posed this question: what statements can be made about a linguistic system? And then, to answer his own question, he stated that there are two and only two types of statements needed:

- 1) How any item is related to other items on adjoining levels.
- 2) How items are related to items on the same level.

The purpose of statements of the second type is to describe the patterns of arrangement which occur. A complete description of arrangements would include a list of distribution classes of lexemes, and a list of constructions.

He added various other points of information such as the concept of the metataxeme, i.e., feature of arrangement in the target language, and also the fact that lexemes are commonly combinations of morphemes and parts of words.

At this point, Professor Lamb interjected some historical information concerning linguistic systems and two traditions in linguistic approach. He discussed the Hindu grammarians and their work with Sanskrit, a tradition which was continued by Bloomfield and others in the field, resulting in what is sometimes called the Item-Arrangement (IA) system. Secondly, he spoke briefly about the Latin grammarians and their work, using the Word-Paradigm (WP) system, in a tradition which has been continued by most language teachers in this country. And finally he commented on IP - Item-Process, making reference to the contributions of Boas and Sapir. He pointed out that structural linguists have in recent years generally regarded the IA system as superior to others, to the extent that they sometimes even forget about the existence of the WP approach. Yet the latter, he stated, is being used almost universally by workers in machine translation.

BERKELEY PRESENTATION

After he offered a definition of a lexeme as "the basic unit of the dictionary or lexicon", Professor Lamb made some observations on lexemes in general, and then, turning back to the handout, shifted the discussion to nonce forms (forms coined as combinations of items), and related material on segmentation.

Professor Lamb talked about the productivity of Russian suffixes, as he presented his handout on Derivational Suffixes. He introduced the second Berkeley conferee, C. Douglas Johnson, who presented material along with the handout A List of Derivational Suffixes Considered for Segmentation. Immediately thereafter, Professor Lamb submitted comments on productivity in the source language as the main criterion for determining the proper degree of segmentation. He added that combinations which are complicated are not segmented.

The remaining time was spent in active open discussion.

CAMBRIDGE LANGUAGE RESEARCH UNIT PRESENTATION Tuesday, 19 July, 3:45-5:00 p.m.

MASTERMAN

Margaret Masterman (Mrs. Braithwaite) presented four CLRU items to the Meeting:

- 1) A flexible procedure for punched-card distribution (from a forthcoming CLRU Report), by M. Kay and T.R. McKinnon Wood.
- 2) Mechanical Pidgin Translation, a handout, of some 175 pages, reporting on a CLRU inquiry on the "language" produced by word-for-word M.T., of the kind at present being carried out by I.B.M. Research.