

ELLSON

Dr. Ellson opened his presentation with a brief account of the results so far obtained by the Indiana project. He said that their basic approach was semantic but this did not mean that syntax was being (or could be) neglected. He added that a problem in semantic analysis has been that of avoiding the necessity for human coding.

He reported progress in assembling a representative sample of scientific writing. Present plans are to provide a bibliography of 25 and reproductions of 5 articles randomly sampled from abstracts published in 1959 in each of 9 scientific fields.

In the remaining time Dr. Ellson sketched an alternative to the general approaches to MT represented by the work of other projects reported at this meeting. In all of these the program for translation is basically deductive, accomplished by applying rules of dictionary equivalence, grammar, syntax, style, etc. to the source language. As evidence for the existence of an alternative, Dr. Ellson pointed to the fact of translation by people, especially children, who do not know these rules. As one alternative, he outlined an inductive approach that utilizes multiple conditional probabilities in a form of pattern analysis and gives rise to a computer or computer program which "learns" to translate by experience with the source and target languages rather than by being programmed in terms of linguistic rules.