

## PRESENTATION AND DISCUSSION OF PAPER 30

### PRESENTATION BY PROF. CECCATO

PROF. CECCATO chose to devote his presentation time to giving his views on some confusion of aims which he had observed with machine translation research workers and sponsors. He distinguished two types of research group - the practical-commercial and the theoretical-scientific. It is important for sponsors particularly to be sure which of the types is best suited for their aims and not to confuse the two. Research groups should not confuse things by speaking of "translation" when all they mean is modified word-for-word transformation. It may not be good economics for a sponsor to get quick results from a "practical" project which may add little or nothing to allied problems of interest to the sponsor. He may be better advised to back a "theoretical" project which aims to find a general solution to all his problems. Clarity of purpose for the researcher is also important and he must not deceive himself that he is imitating man's procedures any more closely than current technology allows. Then he will best be able to decide on a compromise procedure. Prof. Ceccato closed by suggesting three points for discussion:-

- (i) To avoid much current useless duplication, sponsors should get together and distribute the work to be done more organically.
- (ii) We need a co-ordinated plan for finding the qualified personnel so desirable and yet so lacking in our field. Less confusion of aims will bring more and better researchers.
- (iii) His own research group at Milan had chosen to work on Russian, this seeming to be of greatest value. They had great difficulty in finding suitable personnel. It would have been better if they had started in their own language and later on adapted to Russian.

### DISCUSSION

DR. PARKER-RHODES put one of Prof. Ceccato's points in his own words and disagreed with it. He did not see a conflict between methodological subtlety and economic results. He would say that basic research into the fundamentals of language is a necessary basis for any successful machine translation procedure. There may be a limited market for improved word-for-word translations, but he could see no future in them.

DR. RUBENSTEIN felt that Prof. Ceccato had been too harsh on scientists who use terms like "perception" and "translation" in speaking about electronic machines. Those that he knew were not deceiving themselves at all. He did not think it would help matters to regard one of the aims of machine translation as being to find out how humans translate. He thought this was a very interesting area but may confuse our primary aims.

PROF. CECCATO thought it strange that most studies in machine translations should be so isolated from closely related disciplines, which surely have a part in the human processes of translation. Machine translation research in Europe is excluded from the disciplines of universities and linguistics professors are pessimistic about its future. There are no psychologists working in the field. Why?

DR. UTTLEY also thought Prof. Ceccato painted the picture blacker than it actually is. Linguists in universities really are doing psychology. Although they and the psychologists do not have a common language, there is much common ground between them.

PROF. REIFLER. Machine translation is still a very young field of research. Given another five years, it may well then be taught within universities.

MRS. CLARKSON spoke as a potential user of machine translation and stated that the early products of research - the 75% accurate outputs - were likely to be of considerable use to her in helping her customers decide which papers needed a human, 100% translation. She was disappointed that only Georgetown University seemed to be offering any practical output.

PROF. CECCATO reiterated that he was only against a confusion of aims. If Mrs. Clarkson wanted 75%, then not only Georgetown but IBM and two or three other groups could supply it.

DR. DOSTERT expressed his amazement that people thought his group's partially acceptable results were devoid of basic research. Any output demands **some** initial research effort. Further, he felt no reason to apologise for gaining a measure of satisfaction from his sponsor with an output of whose limitations he was fully aware and seeking to reduce. Why shouldn't people use the early, unpolished results of research? Bleriot did not fear to use his machine to fly the Channel because he knew better machines would be available in five years time!

MR. GLASERSFELD, on behalf of Prof. Ceccato, said that there was no intention on his part to introduce values into translation procedures that are for a particular purpose. Prof. Ceccato meant that there were different **types** of research required for quick, practical results as compared with results of broader scientific value. There is no question that the one is as good as the other, but they are different and in different directions. The distinction between them should be clearly maintained.

*J. McDANIEL*