DEVICES THAT can "read" a printed page automatically will be needed before translations from one language to another by electronic "brains" will be of any practical value, many computer specialists believe. Although scientists now know how to instruct giant "brains" so that the translations they do make sensible reading about 85% of the time, many of them believe it will be a long time before the machine replaces a human translator. Two reasons for this are that many words have two or more meanings and that there are wide variations in grammatical structure of sentences from one language to another.

In a public demonstration at the International Business Machines world headquarters in New York, Russian was translated into English by an electronic "brain." Dr. Leon Dostert of Georgetown University, Washington, cooperated with IBM mathematicians in preparing the instructions required by the machine to do its translating.

About two years ago, Dr. Harry Huskey and two colleagues at the University of California at Los Angeles worked out the instructions necessary to translate German to English, using SWAC, the National Bureau of Standards' Western Automatic Computer. The same methods they used could, however, be applied to translation of other languages, including Russian.