PRESENTATION AND DISCUSSION OF PAPER 28

PRESENTATION BY MR. SAKAI

MR. SAKAI said that comparison of his paper with Paper 34 (A New Model of Syntactic Description, by Dr. A. F. Parker-Rhodes) would be instructive. He then described his own paper briefly, observing that Section 6, on expansion coefficients, would be easy for mathematicians, but not for others. These coefficients, he said, have ordinary Boolean properties.

DISCUSSION

MR. DAVIES pointed out that the relation denoted by "&" in the paper was defined as non-symmetric, thus differing from the normal Boolean "and".

DR. OETTINGER said Mr. Sakai's calculus had some of the properties of those in the works of Bar-Hillel and Lambek, though some of the practical implications of the calculus were much more evident in Mr. Sakai's work.

DR. HAYS said it appeared certain that with this method, every possible structure of a sentence would be found. He asked whether, for example, each of the alternatives listed on page 603, table 6, had to be examined in turn.

MR. SAKAI answered that each one had to be so examined.

 $\ensuremath{\mathtt{MR}}$. DAVIES asked now the method described in the paper would deal with discontinuous constituents.

MR. SAKAI said there were two ways; either by using a notation like ((12)(57)), which was difficult to programme, or on the basis of the following:

suppose u = xyzThen u = (xy).z or x(y.z)xy = /u/z or yz = x/u/y = x/(/u/z)/ or /(x/u/)/z

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609