

Nov 59

ALGOL meeting in Paris.

Report of the sub-committee on

THE CHARACTER OF DECLARATIONS.

Members of the sub-committee:

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*what to
delete report b/c the
acceptant*

should be such that

We recommend:

1. ALGOL 1 should be only slightly ~~modified~~ ^{different from the Zürich ALGOL. The modifications} ~~in such a way that~~ (a) later extensions will not make ALGOL 1 programs obsolete, and (b) the most obvious extensions are included.

2. With a view to later discussion (ALGOL 2 etc.) we include in the report some views on the desirable further extensions.

1. FEATURES TO BE INCLUDED IN ALGOL 1.

1.1. Assuming that the concept of "program" is suitably defined, we recommend: All declarations in the main program (including procedure declarations) should be written at the head of the program.

1.2. Inside procedures all declarations should be written at the beginning, immediately following the begin.

1.3. Array declarations inside procedures are allowed to contain expressions depending on input variables and variables quoted in REQUIRE, in their lists defining subscript ranges.

2. COMMENTS ON LATER EXTENSIONS.

The principal questions in connexion with range-limited declarations is whether the range should be defined by the write-up or by ~~the~~ the time (the dynamic succession of statements). The simplicity of introducing declarations inside procedures (present both in the Zürich ALGOL and in proposal 1.3 above) indeed depends on the identity of the write-up and the dynamic work of procedures.

speaking
In general there are therefore three possibilities open:

Range-limited declarations should have their range defined either (1) strictly

by the write-up, or (2) by the time succession, or (3) both by write-up and time succession, which implies (for correct operation) that the statements defining the range ~~are enclosed~~ form a closed unit, both in write-up and dynamically.