

The replacement rules given in document 3, sections 4., 8 and 4., 9 may be summarized as follows :

To formal arrays, functions, procedures, formats, labels and switches there must, in the call, correspond identifiers representing exactly the same kinds of entities. These actual entities must all correspond completely to their formal counterparts with respect to types, number and bounds of subscripts, and number and nature of parameters, where nature must be understood recursively to mean types, number and bounds of subscripts, etc ... Prior to the execution of the procedure compound these formal identifiers will be understood to be replaced by their actual counterparts, treated during the execution as global parameters. Any conflicts with local identifiers arising from this replacement must be removed by suitable systematic changes of the local identifiers in question. Expressions, which may appear in either actual array parameters or as subscripts in switches must be understood to be evaluated once prior to the execution of the procedure compound and then replaced by their actual values calculated at this moment

To formal identifiers specified to be variables of a certain type, there will, in the call, correspond expressions. These will, with two exceptions, be evaluated once immediately before the entrance into the procedure compound and assigned to unique internal variables of the types specified for the corresponding formal specifications. These assignments must be permitted once.

The two exceptions referred to are the following :

1) Expressions consisting only of a simple variable of the same type as the formal identifier (case 1.1). In this case, the formal identifier will be replaced by the identifier of the actual simple variable, just as in the case of functions, procedures, etc ...

2) Expressions consisting of a single subscripted variable from an array of the same type as the formal identifier (case 1.3). In this case, all the subscript expressions will be evaluated once, immediately prior to the execution of the procedure compound and the formal identifier will be replaced throughout the procedure compound by the subscripted variable having these values as its constant subscripts.