

4. SUB-BLOCKS

An anonymous sub-block is represented in the compiled program by (1) a prototype and (2) the coding related to the block, enclosed by a begin block (BB) and an end block (EBL) "subroutine" call.

Storage for data local to the block (the B.I.) and a driver for the B.I. are created when the block is entered, i.e. the PSC encounters the PP call.

The update display mechanism is simplified, in that DISPLAY is correct for all levels except that of the block itself.

When DISPLAY has been updated, the declarations and statements of the block are performed in the indicated sequence. There is no need to return to the runtime system between the last declaration and the first statement.

It should be noted that "statements" is unnecessary if end of declaration code for a sub-block contains a jump to the first statement.

It is not possible to establish references to a sub-block or its interior.

```
procedure BB(p); ref (prototype) p;  
  begin  
    CD :- new driver(new object(p), CD, none, CD, none, true,  
                                     p.level);  
  
    CD.obj.MDP :- CD;  
    DISPLAY [p.level] :- CD.obj;  
    DDISPLAY [p.level] :- CD;  
    go to p. declare;  
  end BB;
```

```
procedure EBL;  
  begin ref (driver) x;  
    x :- CD.drp;  
    deletenotice (CD);  
    CD :- x;  
  end EBL;
```