Discrete System Simulation

To simplify a task of writing a discrete simulation program, a number of programming languages are used. The two most common used languages are :

1) GPSS (General Purpose Simulation Software)
2) SIMSCRIPT

These languages are used to describe a system and establish a system image and execute a simulation algorithm. Most programming also provides report generator. These language also offer many convenient facilities such as:

a) Automatic generators of streams of pseudo random numbers for any desired statistics destination.
b) Automatic data collection
c) Their statistics analysis and report generators.
d) Automatic handling of queues, etc.

In addition, a good simulation also provides a good builder with the view of the world that next building easier. Every discrete system simulation language must provide the concept and statement for:

a) Representing the state of a system at a single point in time(static modeling)
b) Moving a system from state to state (Dynamic Modeling) and
c) Performing relevant task such as generation of random number, data analysis and report generation.