In this chapter we describe, in turn, each of the metamodels. However, in some sections (especially Section 5.1), we use the analysis of the metamodel as a basis for exploring some of the more general semantics of the metamodels. We also discuss some of the ambiguities and inconcise definitions we found in all the texts we examined. In part, this represents our own growth of understanding as we progressed through the creation of each specific metamodel.

5.1 Booch

Booch’s [6] methodology includes class diagrams and object diagrams (statics), interaction diagrams, state transition diagrams and then, for higher level packaging, module diagrams, process diagrams, and class categories.

The static metamodel is described in Figure 5.1. The main focus is the Class, the Object, Messages, and Operations (the last two often equated in Booch — and see below), and a full range of relationships. Classes, which have a large number of attributes at this metalevel and seem to have a similar flavour to the increasingly acceptable term “object type,” are associated with Attributes
FIGURE 5.1. Booch's object/class diagram.