

concept of a set in that it refers to a group of objects. Although a set can have elements of any type, the objects in a class have some relation to one another. For example, it is possible to define a set consisting of

{ 3, eggs, blue, tires, art }

However, members of this set have no common relationship. In contrast, planes, trains, and automobiles in one class are related because they are all types of transportation.

The link AKO is used here to relate one class to another. The AKO is not used to relate a specific individual because that is the function of IS-A. The AKO relates an individual class to a parent class of classes of which the individual is a child class.

From another viewpoint, the AKO relates **generic** nodes to generic nodes whereas the IS-A relates an instance or an **individual** to a generic class. Notice in Figure 2.5 that the more general classes are at the top and the more specific classes are at the bottom. The more general class that an AKO arrow points to is called a **superclass**. If a superclass has an AKO pointing to another node, then it is also a class of the superclass the AKO points to. Another way of expressing this is that an AKO points from a **subclass** to a class. The link ARE is sometimes used for AKO, and ARE is read as the ordinary verb "are."

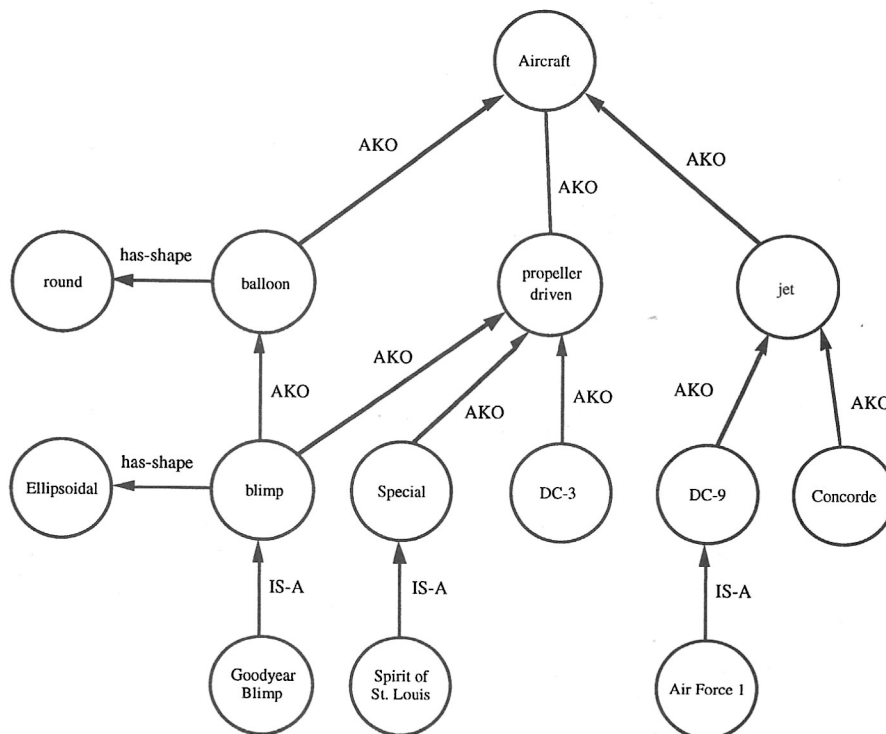


Figure 2.5 A Semantic Net with IS-A and A-Kind-Of (AKO) Links

The objects in a class have one or more **attributes** in common and each attribute has a **value**. The combination of attribute and value is a **property**. For