questions to be answered at this stage are: What is the domain that the ontology will cover? For what we are going to use the ontology? For what types of questions should the ontology provide answers? Who will use and maintain the ontology?

7.2.2 Consider Reuse

With the spreading deployment of the Semantic Web, many ontologies, especially for common domains (social networks, medicine, geography), are available for use. Thus, we rarely have to start from scratch when defining an ontology. There is almost always an ontology available from a third party that provides at least a useful starting point for our own ontology (see section 7.3).

7.2.3 Enumerate Terms

A first step toward the actual definition of the ontology is to write down in an unstructured list all the relevant terms that are expected to appear in the ontology. Typically, nouns form the basis for class names, and verbs (or verb phrases) form the basis for property names (e.g., *is part of*, *has component*).

Traditional knowledge engineering tools such as laddering and grid analysis can be productively used at this stage to obtain both the set of terms and an initial structure for these terms.

7.2.4 Define Taxonomy

After the identification of relevant terms, these terms must be organized in a taxonomic hierarchy. Opinions differ on whether it is more efficient/reliable to do this in a top-down or a bottom-up fashion.

It is, of course, important to ensure that the hierarchy is indeed a taxonomic (subclass) hierarchy. In other words, if A is a subclass of B, then every instance of A must