SPARQL Update provides several more constructs for managing parts of triple stores. The update operations are particularly useful if one is progressively adding data to a triple store. In the following section, we discuss a particular case where such update operations are useful.

3.9 The Follow Your Nose Principle

SPARQL provides facilities to query and update triple stores. But how do these triple stores get populated? As mentioned earlier, many data providers make their data available via SPARQL endpoints. However, other data providers only make their data available as Linked Data. That is, RDF data made available either as files on the web or embedded in web pages. We can insert these triples into our local triples store. However, the Semantic Web allows any provider to describe their information using other resources and information on the web. In these cases, the *follow your nose principle* can be applied: Given a URL that points to some RDF, one can dereference that URL and load the corresponding data. One can continue to do so until there are enough triples to answer the given query.

Some query engines such as SQUIN implement this feature (see http://squin.sourceforge.net/). Also, the newer version of SPARQL includes commands for such federated querying. However, such federated querying is often time intensive because the data must be collected at query time.

Following your nose is one way to collect the information needed to process a query using the Semantic Web.

3.10 Summary

In this chapter, we introduced SPARQL, both its query and update portions, as well as the basic infrastructure that supports SPARQL.