feature adds significant expressive power to OWL, but at the high price of undecidability; that is, there can be no inference engine that draws exactly the same conclusions as the SWRL semantics.

Compared to OWL2 RL, SWRL lies at the other end of the integration of description logics and function-free rules. Where OWL2 RL uses a very conservative approach, seeking to combine the advantages of both languages in their common sublanguage, SWRL takes a more maximalist approach and unites their respective expressivities. From a practical perspective, the challenge is to identify sublanguages of SWRL that find the right balance between expressive power and computational tractability. A candidate for such a sublanguage is the extension of OWL DL with *DL-safe rules*, in which every variable must appear in a non-description logic atom in the rule body. See the articles on integrating rules with description logics in suggested reading.

As a remark, an outcome similar to SWRL can be achieved by combining RIF-BLD with OWL2 RL (see suggested reading).

5.8 Rules in SPARQL: SPIN

Rules can be expressed in SPARQL using its CONSTRUCT feature. For example, the rule

$$grandparent(X, Z) \leftarrow parent(Y, Z), parent(X, Y)$$

can be expressed as:

```
CONSTRUCT {
    ?X grandParent ?Z.
}   WHERE {
    ?Y parent ?Z.
    ?X parent ?Y.
}
```