

```
<swrlx:individualPropertyAtom swrlx:property="childOf">
  <ruleml:Var>Z</ruleml:Var>
  <ruleml:Var>Y</ruleml:Var>
</swrlx:individualPropertyAtom>
</ruleml:And>
</ruleml:if>
</ruleml:Implies>
```

5.12 Summary

- Rules on the (semantic) web form a very rich and heterogeneous landscape.
- Horn logic is a subset of predicate logic that allows efficient reasoning. It forms a subset orthogonal to description logics. Horn logic is the basis of monotonic rules.
- RIF is a new standard for rules on the web. Its logical dialect BLD is based on Horn logic.
- OWL2 RL, which is essentially the intersection of description logics and Horn logic, can be embedded in RIF.
- SWRL is a much richer rule language, combining description logic features with restricted types of rules.
- Nonmonotonic rules are useful in situations where the available information is incomplete. They are rules that may be overridden by contrary evidence (other rules).
- Priorities are used to resolve some conflicts between nonmonotonic rules.
- The representation of rules in XML-like languages, such as those provided by RIF and RuleML, is straightforward.