

- An *axis specifier* determines the tree relationship between the nodes to be addressed and the context node. Examples are parent, ancestor, child (the default), sibling, and attribute node. *//* is such an axis specifier; it denotes descendant or self.
- A *node test* specifies which nodes to address. The most common node tests are element names (which may use namespace information), but there are others. For example, *** addresses all element nodes, *comment()* all comment nodes, and so on.
- *Predicates* (or *filter expressions*) are optional and are used to refine the set of addressed nodes. For example, the expression *[1]* selects the first node, *[position()=last()]* selects the last node, *[position() mod 2 = 0]* the even nodes, and so on.

We have only presented the abbreviated syntax, but XPath actually has a more complicated full syntax. References are found at the end of this appendix.

A.5 Processing

So far we have not provided any information about how XML documents can be displayed. Such information is necessary because unlike HTML documents, XML documents do not contain formatting information. The advantage is that a given XML document can be presented in various ways when different *style sheets* are applied to it. For example, consider the XML element

```
<author>
  <name>Grigoris Antoniou</name>
  <affiliation>University of Bremen</affiliation>
  <email>ga@tzi.de</email>
</author>
```