

```
</author>
<author name="Cynthia Singleton">
  <book title="The Semantic Web"/>
  <book title="Browser Technology Revised"/>
</author>
</library>
```

Its tree representation is shown in figure A.2.

In the following we illustrate the capabilities of XPath with a few examples of path expressions.

1. Address all author elements.

```
/library/author
```

This path expression addresses all author elements that are children of the library element node, which resides immediately below the root. Using a sequence  $/t_1/\dots/t_n$ , where each  $t_{i+1}$  is a child node of  $t_i$ , we define a path through the tree representation.

2. An alternative solution for the previous example is

```
//author
```

Here `//` says that we should consider all elements in the document and check whether they are of type `author`. In other words, this path expression addresses all author elements anywhere in the document. Because of the specific structure of our XML document, this expression and the previous one lead to the same result; however, they may lead to different results, in general.

3. Address the location attribute nodes within library element nodes.

```
/library/@location
```