232 XML Basics

However, while the order of elements is important, the order of attributes is not. So, the following two elements are equivalent:

```
<person lastname="Woo" firstname="Jason"/>
<person firstname="Jason" lastname="Woo"/>
```

This aspect is not represented properly in the tree. In general, we would require a more refined tree concept; for example, we should also differentiate between the different types of nodes (element node, attribute node, etc.). However, here we use graphs as illustrations, so we do not go into further detail.

Figure A.1 also shows the difference between the *root* (representing the XML document), and the *root element*, in our case the email element. This distinction will play a role when we discuss addressing and querying XML documents.

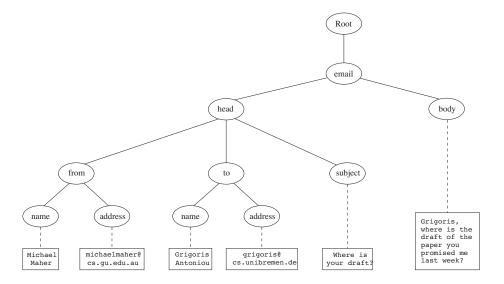


Figure A.1: Tree representation of an XML document