238 XML Basics

Readers should study the references between persons.

## **XML Entities**

An XML entity can play several roles, such as a placeholder for repeatable characters (a type of shorthand), a section of external data (e.g., XML or other), or as a part of a declaration for elements. For example, suppose that a document has several copyright notices that refer to the current year. Then it makes sense to declare an entity

```
<!ENTITY thisyear "2007">
```

Then, at each place the current year needs to be included, we can use the entity reference &thisyear; instead. That way, updating the year value to "2008" for the whole document will only mean changing the entity declaration.

## A Concluding Example

As a final example we give a DTD for the email element presented previously:

```
<!ELEMENT email (head,body)>
<!ELEMENT head (from,to+,cc*,subject)>
```