

unique identifier. For example, the combination of postcode and street address number will provide a unique identifier for any dwelling in the Netherlands:

```
:postcode      rdf:type    owl:DatatypeProperty .
:addressNumber rdf:type    owl:DatatypeProperty .

:Dwelling
    rdf:type    owl:Class ;
    owl:hasKey ( :postcode :addressNumber ) .
```

Note that the key mechanism allows us to define *inverse functional datatype properties* that are local to a class. Any two individuals of type `ex:Dwelling` that have the same value for the `:postcode` and `:addressNumber` must be considered to be the same. Unfortunately OWL2 DL does not allow us to specify global inverse functional datatype properties because of computational consequences.

#### 4.4.7 Individual Facts

Now that we have a general idea of how we define properties and classes in OWL2, we turn our attention to the individual entities governed by our model. In many cases we already have a lot of knowledge about these entities and only need class axioms to infer *extra* information. Statements about individuals are usually called *assertions*.

**Class and Property Assertions** Class membership and property assertions in OWL2 are stated in the same way as in RDF Schema:

```
:Apartment      rdf:type    owl:Class .

:BaronWayApartment rdf:type    :Apartment ;
    :hasNumberOfRooms "4"^^xsd:integer ;
    :isRentedBy      :Paul .
```