

Web Services and Web Data

XJCO3011

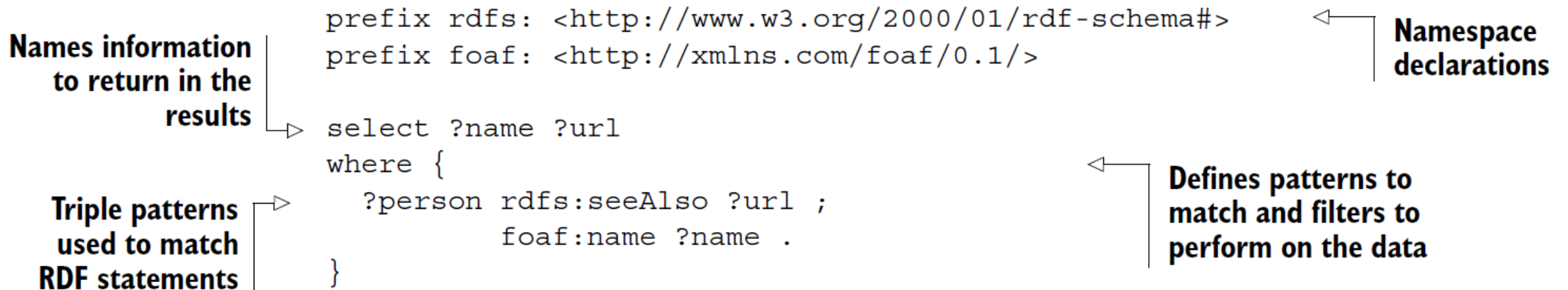


Session 19 -SPARQL Examples

Querying Flat RDF Files with SPARQL

- This query will return some number of people and their URLs.
- Anyone listed in the FOAF file **with an `rdfs:seeAlso` URL and a `foaf:name`** will be returned.

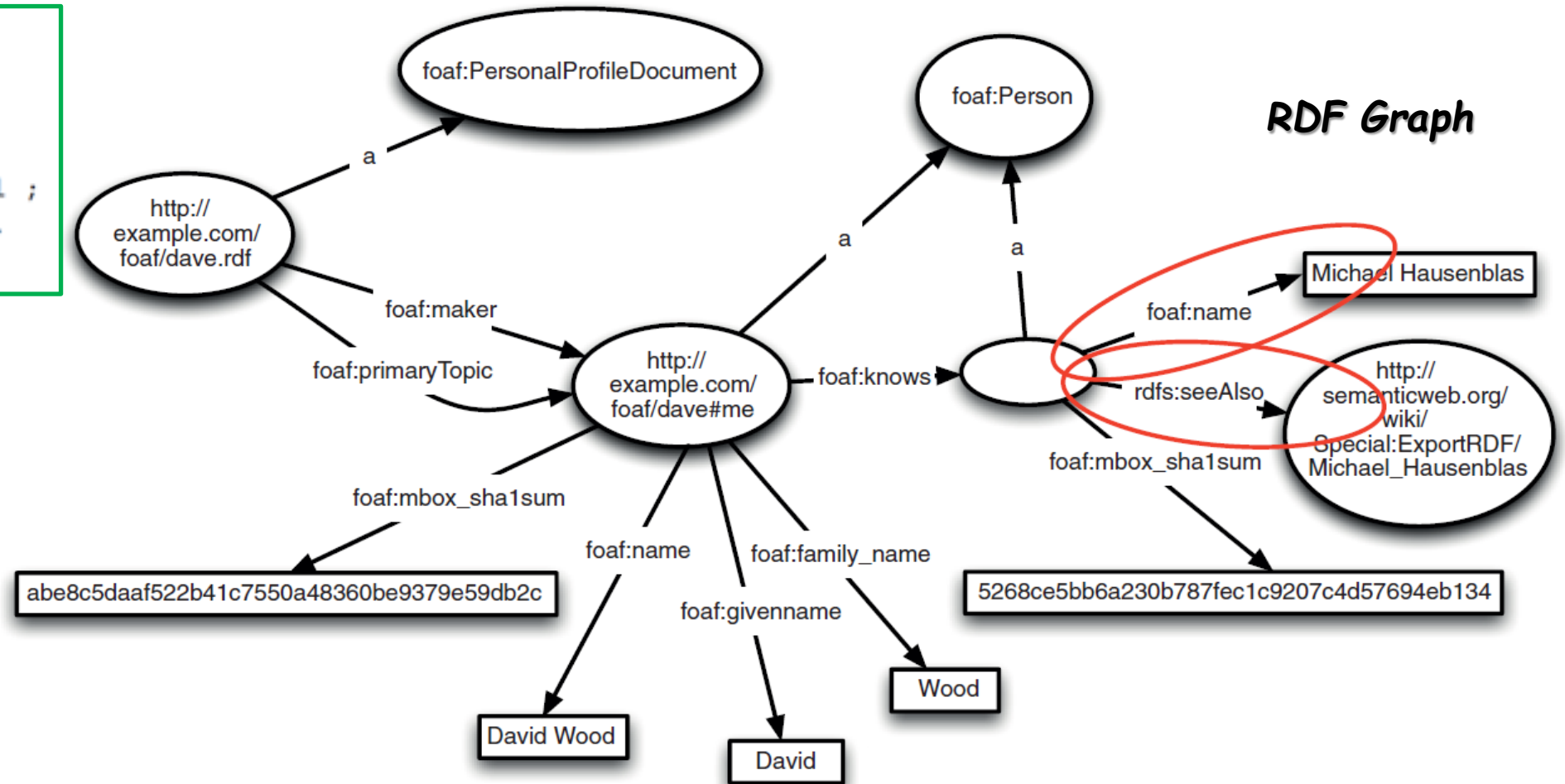
Listing 5.2 SPARQL query to find FOAF friends



Select Query in Action

Query

```
select ?name ?url
where {
  ?person rdfs:seeAlso ?url ;
    foaf:name ?name .
}
```



Result

name	url
"Michael Hausenblas"	<http://semanticweb.org/wiki/Special:ExportRDF/Michael_Hausenblas>

We will use SPARQL Explorer for DBPedia
<http://dbpedia.org/snorql/>

Example 1

Find any entity which has a 'foaf:name' predicate

```
SELECT ?entity WHERE {  
  ?entity foaf:name ?name  
}
```

Example 2

Find in DBPedia any 'subject'(entity) related to Leeds

```
SELECT ?sub WHERE {  
  ?sub ?pred :Leeds.  
}
```

Example 3

Find in DBPedia any 'subject' related to "Leeds"

```
SELECT ?sub WHERE {  
  ?sub ?pred "Leeds"@en.  
}
```

Example 4

Find the name of any person born in Leeds

```
SELECT ?name ?entity WHERE {  
  ?entity foaf:name ?name.  
  ?entity dbo:birthPlace :Leeds.  
}
```


Example 5

Find the name and spouse of any person born in Leeds

```
SELECT ?name ?spouse WHERE {  
  ?entity foaf:name ?name.  
  ?entity dbo:birthPlace :Leeds.  
  ?entity dbp:spouse ?spouse.  
}
```

Example 6

Find any female person born in Leeds before 1/1/1900

```
SELECT ?name ?birth ?entity WHERE {  
  ?entity foaf:name ?name.  
  ?entity dbo:birthPlace dbr:Leeds.  
  ?entity foaf:gender "female"@en.  
  ?entity dbo:birthDate ?birth .  
  FILTER (?birth < "1900-01-01"^^xsd:date).  
}
```

Example 7

People who were born in Berlin ordered by name

```
SELECT ?person
WHERE
{
    ?person dbo:birthPlace dbr:Berlin .
    ?person foaf:name ?name .
} ORDER BY ?name
```

Example 8

The capital city of France

```
SELECT ?city {  
  :France dbo:capital ?city.  
}
```

Example 9

The capital cities of the world

```
SELECT ?city ?country {  
  ?country dbo:capital ?city.  
}
```

For you to do

- The population of France
- The population of world countries
- The depiction (picture) of any male person born in Leeds