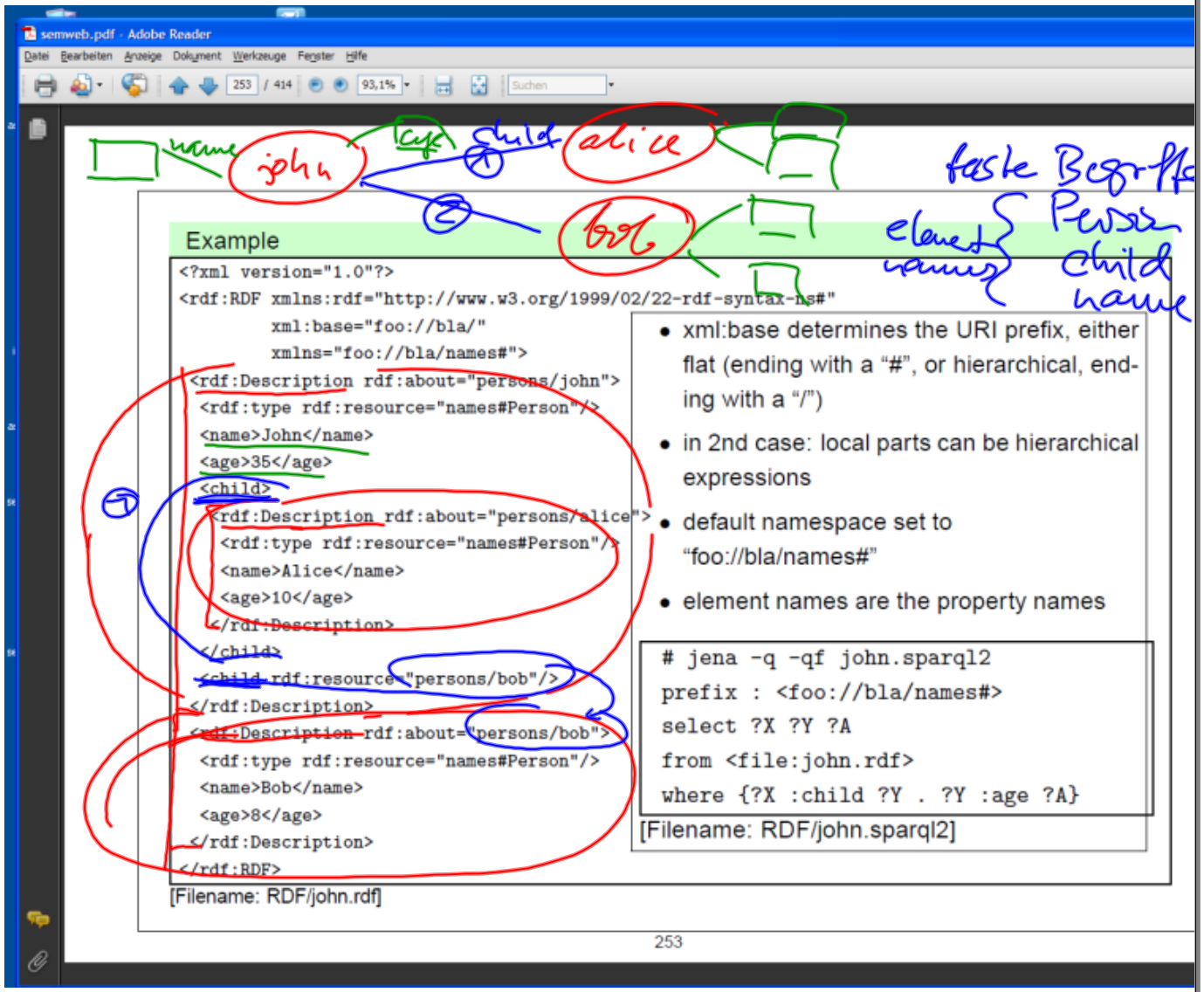
semweb.pdf - Adobe Reader
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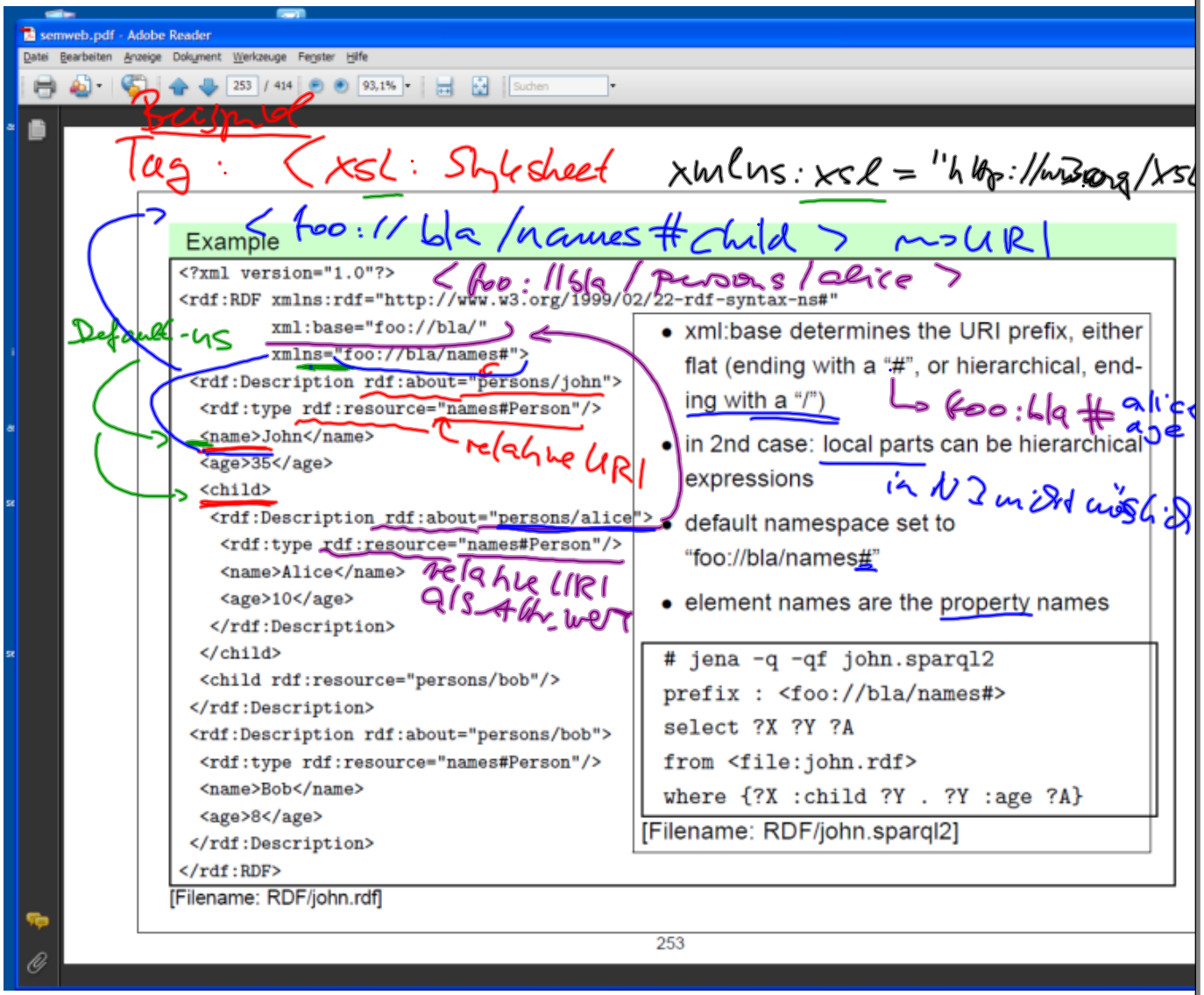
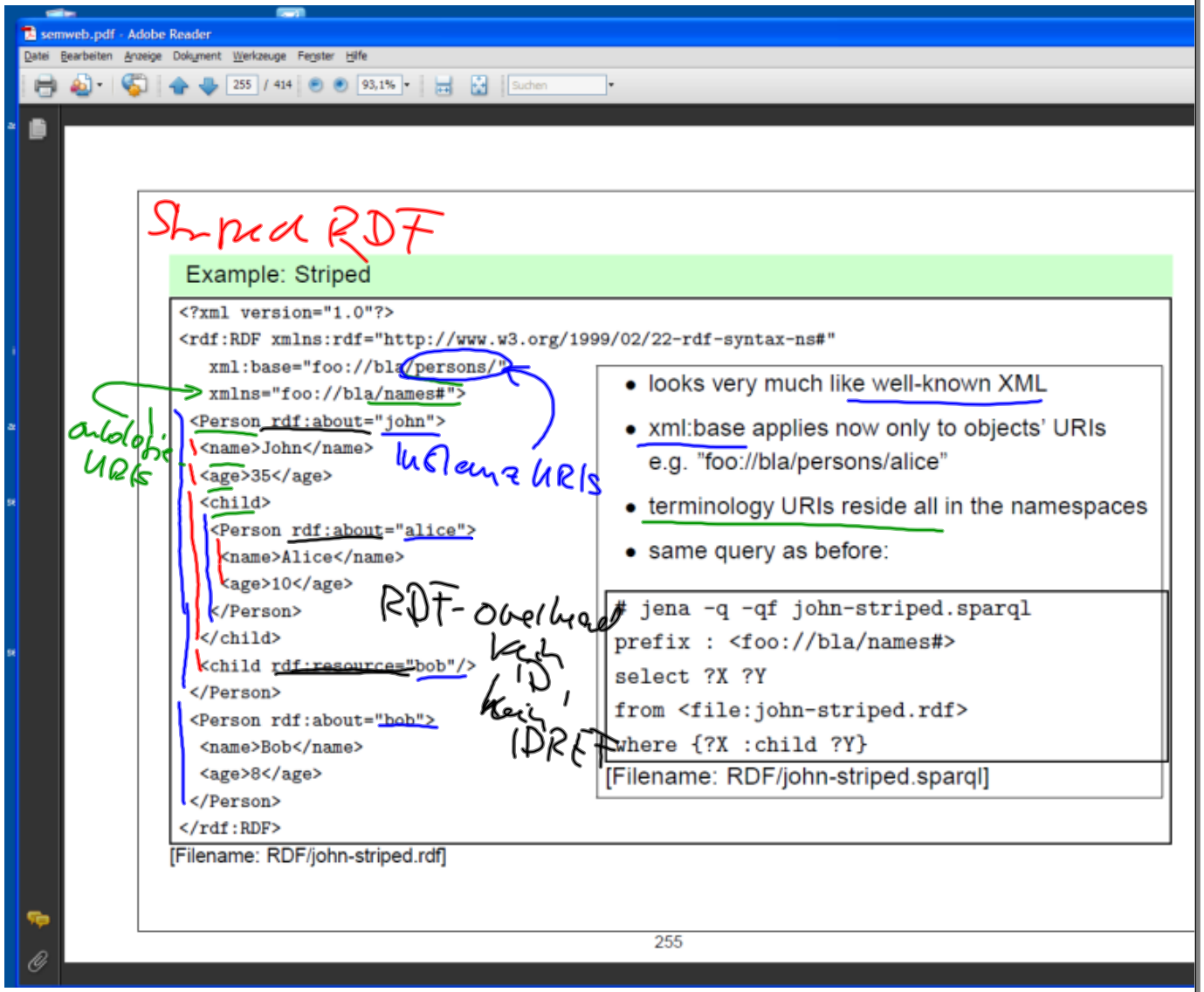
93,1%
Suchen
name
john
type
child
alice
bob
Example
<?xml version="1.0"?>
<rdf:RDF xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
xml:base="foo://bla/"
xmlns="foo://bla/names#">
<rdf:Description rdf:about="persons/john">
<rdf:type rdf:resource="names#Person"/>
<name>John</name>
<age>35</age>
<child>
<rdf:Description rdf:about="persons/alice">
<rdf:type rdf:resource="names#Person"/>
<name>Alice</name>
<age>10</age>
</rdf:Description>
</child>
<child rdf:resource="persons/bob"/>
</rdf:Description>
<rdf:Description rdf:about="persons/bob">
<rdf:type rdf:resource="names#Person"/>
<name>Bob</name>
<age>8</age>
</rdf:Description>
</rdf:RDF>
[Filename: RDF/john.rdf]
xml:base determines the URI prefix, either flat (ending with a "#", or hierarchical, ending with a "/")
in 2nd case: local parts can be hierarchical expressions
default namespace set to "foo://bla/names#"
element names are the property names
jena -q -qf john.sparql2
prefix : <foo://bla/names#>
select ?X ?Y ?A
from <file:john.rdf>
where {?X :child ?Y . ?Y :age ?A}
[Filename: RDF/john.sparql2]
253


semweb.pdf - Adobe Reader
Datei Bearbeiten Anzeige Dokument Werkzeuge Fenster Hilfe
Example
<?xml version="1.0"?>
<rdf:RDF xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
xml:base="foo://bla/"
xmlns="foo://bla/names#">
<rdf:Description rdf:about="persons/john">
<rdf:type rdf:resource="names#Person"/>
<name>John</name>
<age>35</age>
<child>
<rdf:Description rdf:about="persons/alice">
<rdf:type rdf:resource="names#Person"/>
<name>Alice</name>
<age>10</age>
</rdf:Description>
</child>
<child rdf:resource="persons/bob"/>
</rdf:Description>
<rdf:Description rdf:about="persons/bob">
<rdf:type rdf:resource="names#Person"/>
<name>Bob</name>
<age>8</age>
</rdf:Description>
</rdf:RDF>
[Filename: RDF/john.rdf]
xml:base determines the URI prefix, either flat (ending with a "#", or hierarchical, ending with a "/")
in 2nd case: local parts can be hierarchical expressions
default namespace set to "foo://bla/names#"
element names are the property names
jena -q -qf john.sparql2
prefix : <foo://bla/names#>
select ?X ?Y ?A
from <file:john.rdf>
where {?X :child ?Y . ?Y :age ?A}
[Filename: RDF/john.sparql2]
253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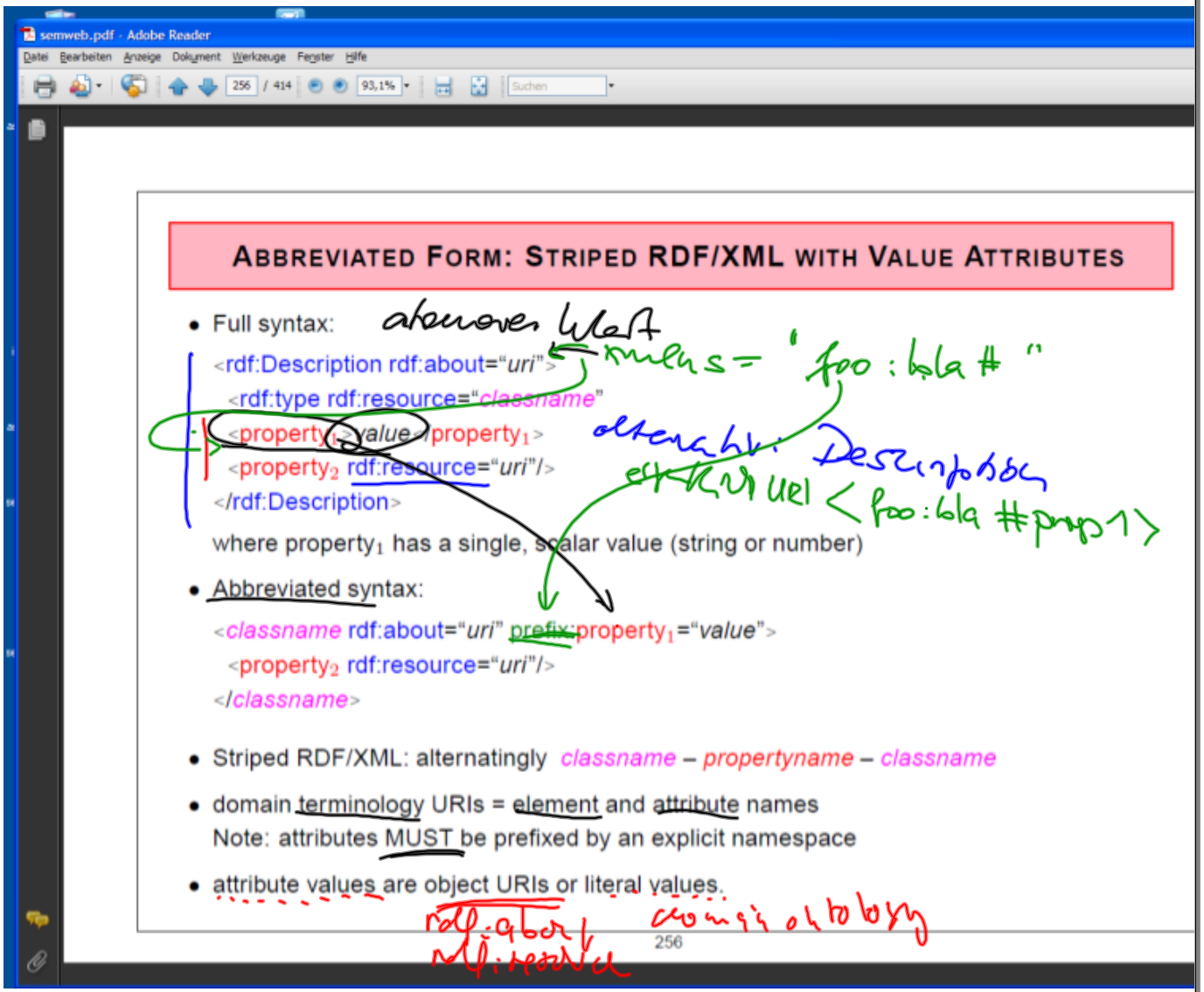
Striped RDF
Example: Striped
<?xml version="1.0"?>
<rdf:RDF xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
xml:base="foo://bla/persons/"
xmlns="foo://bla/names#">
<Person rdf:about="john">
<name>John</name>
<age>35</age>
<child>
<Person rdf:about="alice">
<name>Alice</name>
<age>10</age>
</Person>
</child>
<child rdf:resource="bob"/>
</Person>
<Person rdf:about="bob">
<name>Bob</name>
<age>8</age>
</Person>
</rdf:RDF>
[Filename: RDF/john-striped.rdf]
looks very much like well-known XML
xml:base applies now only to objects' URIs
e.g. "foo://bla/persons/alice"
terminology URIs reside all in the namespaces
same query as before:
jena -q -qf john-striped.sparql
prefix : <foo://bla/names#>
select ?X ?Y
from <file:john-striped.rdf>
where {?X :child ?Y}
[Filename: RDF/john-striped.sparql]
RDF-overhead
255


semweb.pdf - Adobe Reader
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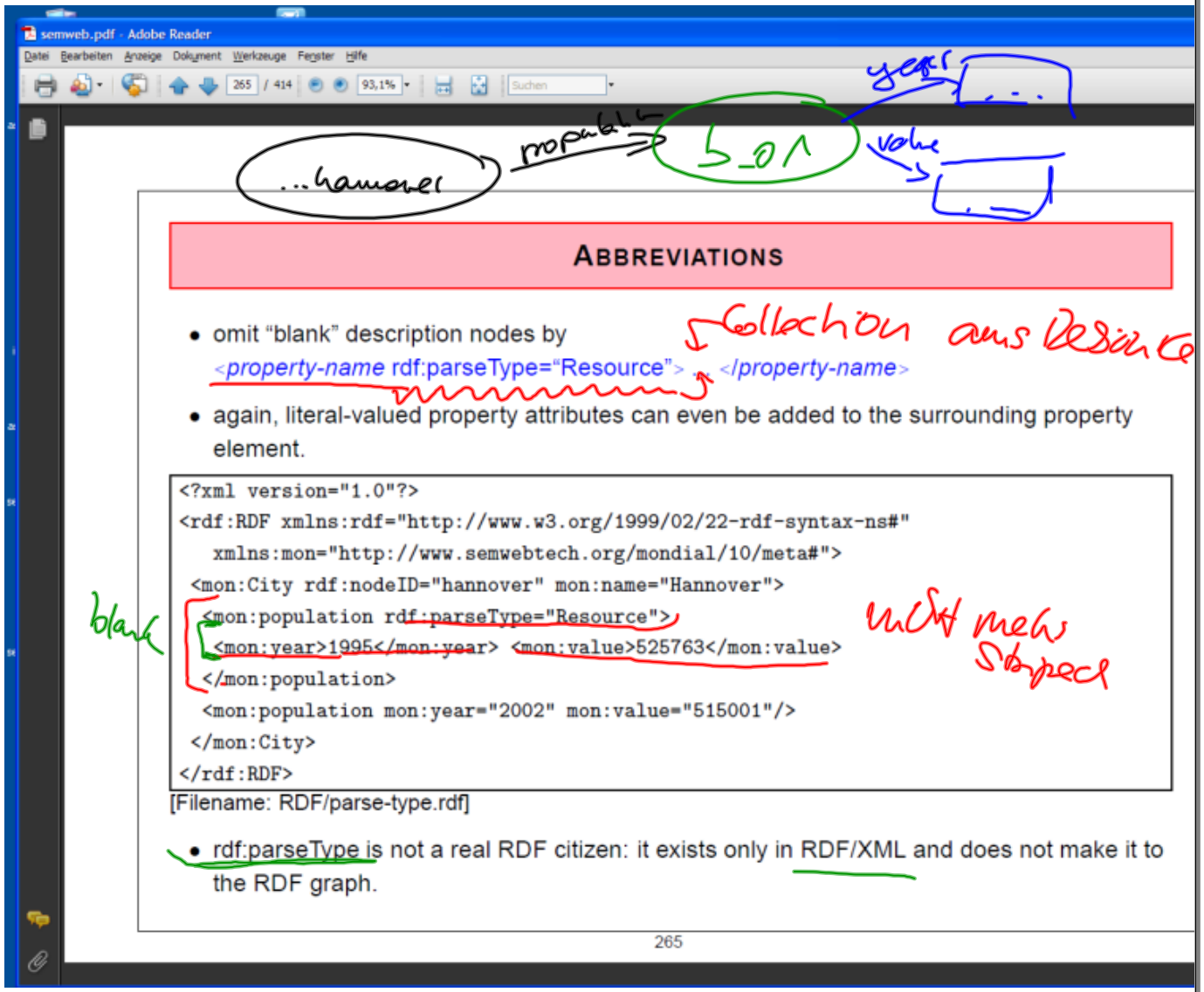
Suchen
ABBREVIATED FORM: STRIPED RDF/XML WITH VALUE ATTRIBUTES
• Full syntax:
<rdf:Description rdf:about="uri">
<rdf:type rdf:resource="classname"
<property1>value</property1>
<property2 rdf:resource="uri"/>
</rdf:Description>
where property1 has a single, scalar value (string or number)
• Abbreviated syntax:
<classname rdf:about="uri" prefix:property1="value">
<property2 rdf:resource="uri"/>
</classname>
• Striped RDF/XML: alternatingly classname – propertyname – classname
• domain terminology URIs = element and attribute names
Note: attributes MUST be prefixed by an explicit namespace
• attribute values are object URIs or literal values.
256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...hannover
population
year
value
ABBREVIATIONS
• omit "blank" description nodes by
<property-name rdf:parseType="Resource"> </property-name>
• again, literal-valued property attributes can even be added to the surrounding property element.
<?xml version="1.0"?>
<rdf:RDF xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
xmlns:mon="http://www.semwebtech.org/mondial/10/meta#">
<mon:City rdf:nodeID="hannover" mon:name="Hannover">
<mon:population rdf:parseType="Resource">
<mon:year>1995</mon:year> <mon:value>525763</mon:value>
</mon:population>
<mon:population mon:year="2002" mon:value="515001"/>
</mon:City>
</rdf:RDF>
[Filename: RDF/parse-type.rdf]
• rdf:parseType is not a real RDF citizen: it exists only in RDF/XML and does not make it to the RDF graph.
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