

RDF / TURTLE

What is RDF ?

What even mean ?

Resource Description Framework

and Turtles ?

Terse RDF Triple Language

Syntax for the RDF Model!

RDF

what is the purpose of it ?

distributed information

distributed information

semantic web

distributed information

semantic web

graph representation

distributed information

semantic web

graph representation

fragmentation of information


distributed information

semantic web

graph representation

fragmentation of information

mechanic communication



who is constructed ?



Triples of Knowledge



List of Tuples with 3 Elements



SUBJECT PREDICATE OBJECT

[(SUBJ PRED OBJ)]



SUBJECT PREDICATE OBJECT

structure

Express information as a list of
statements

statements

SUBJECT PREDICATE OBJECT

I own my_apartment

my_apartment has my_computer

my_apartment has my_bed

my_apartment is_in Philadelphia

I own my_apartment

my_apartment has my_computer

my_apartment has my_bed

my_apartment is_in Philadelphia



as a graph like structure

SUBJECT PREDICATE OBJECT

I -> own -> my_apartment

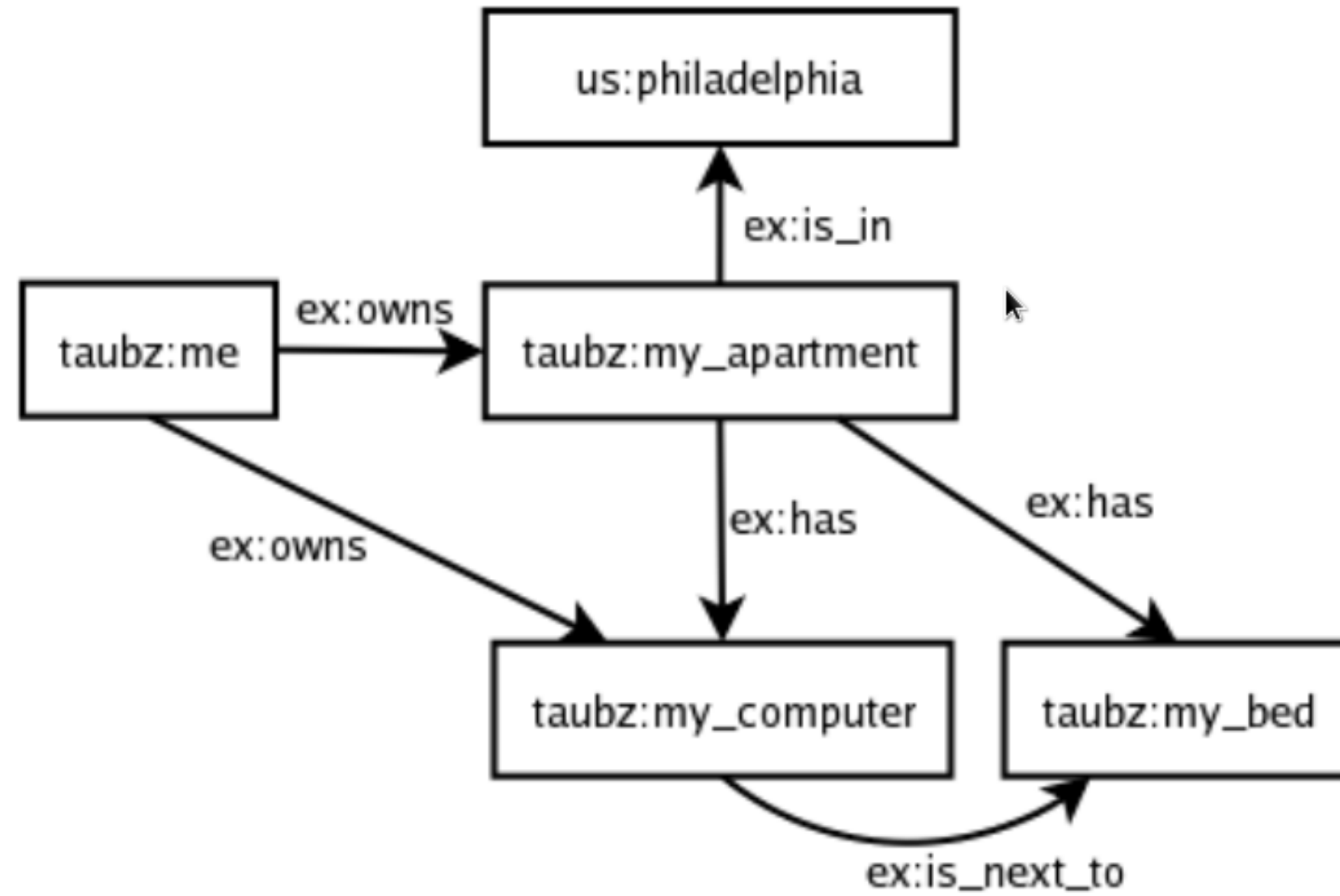
my_apart -> has -> my_computer


my_apart -> has -> my_bed

my_apart -> is_in -> Philadel


global scope of each

Subject and Object







what is this good for ?



semantic and systematic search



semantic meaning




like English words or phrases

```
quest = (my_apart, has, what)
for each stat in kldg {
    if ((stat.subject == quest.subject)
... ) {
    call FoundAnswer(stat)
}
```

Output:

my_apartment has my_computer

my_apartment has my_bed



made to work on web

URIs

URIs as Subjects

URIs as Objects

example of



<http://example.org/has>

what so far

.1 A fact is expressed as a triple of
the form


(Subject, Predicate, Object).

.2 Subjects, predicates, and objects are given as names for entities, whether, concrete or abstract, in the real world.

.3 Names are in the format of URIs, which are opaque and global.

values of objects can be
Literals

Literals can be wherever raw text
or value you want to



we can use black nodes or

better to say,


a local value that only exist on this
tuple, but is not global

_:anon123 foaf:name "some one"

_:anon123 ex:has_read "books"


_:anon123 dc:author _:anon321

_:anon321 foaf:name "Sr Carol"



this is like local values

we can use quotation mark for
literals




anonymous nodes with '_'

literals as raw textual
representations

untyped and typed literals for
parsing and context
with URI

NTriples

With N-Triples




we can abbreviate stuff

prefix

@prefix

@prefix rdf:

<http://www.w3.org/1999/02/22-rdf-syntax-ns#>



use comas as a list kind data



`http://br.org tafl:has "32", "42"`

or use brackets

@prefix br http://br.org

br [tafl:has "32", "42"]