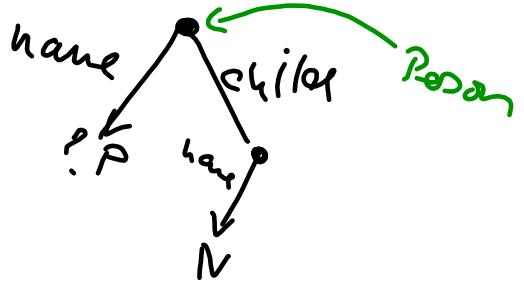
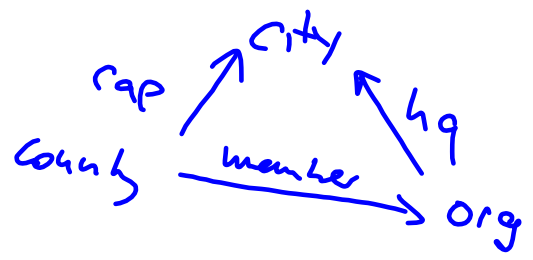


- $?X : name ?P ; :child [ :name ?N ]$
- $?X : name ?P . ?X : child ?Y . ?Y : name ?N$
- $[ a : Person ; :name ?P ; :child [ :name ?N ] ]$



Dez 9-10:08

Bsp cyclic queries



Dez 9-10:31

S | P | C

→ SPARQL-  
Algebra

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Relationen:  
 SPJ R-Algebra  
 conjunctive (positive) queries  
 SPJ R: Basic SPJ R Patterns  
 $\{P_1, P_2, P_3, \dots\}$   
 next: *negation*  
 Union, Intersection, Minus

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select ?X ?Y ?Z  
 from (moodle.43)  
 where { ?X ?Y ?Z }

X/John	Y/name	Z/John's
X/John	Y/ate	Z/35
X/Lice	.	.
	:	:

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Semantics of SPARQL (patterns)

$\llbracket ?X ?Y ?Z \rrbracket$  ?

$= \{ (x,y,z) \mid (x,y,z) \text{ is a triple in the DB (+ resolver)} \}$

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partiel :

?X a : county . ?X name ?N .

OPTIONAL { ?X number ?P }

?B:

N : ?X → http://.../germany

?N → "germany"

?P not defined

Dez 9-10:50

distinct { ?X : age 35 }

select ?P

{ ?Y ?P 35 }

?P / age

?P / shoesize

?P / area

?P / pop

Xquery

for \$x in //\*

where \$x/text() = '35'

return \$x/name()

Dez 9-10:56