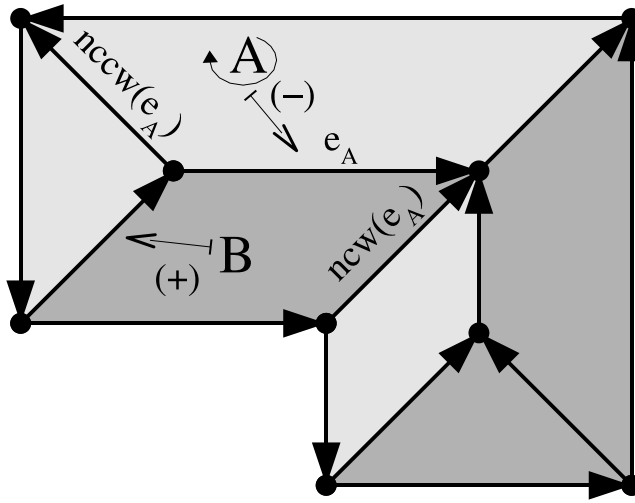


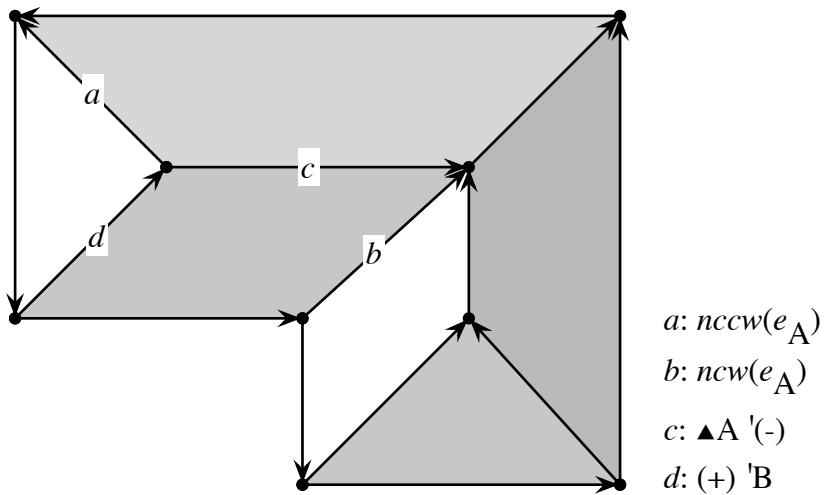
# Fig 1.5 Suggestion

Ref comp\_databases\_theory/A Topological Relational Algebra in Lisp  
 Per Norbert Paul/Topological Databases for Architectural Spaces

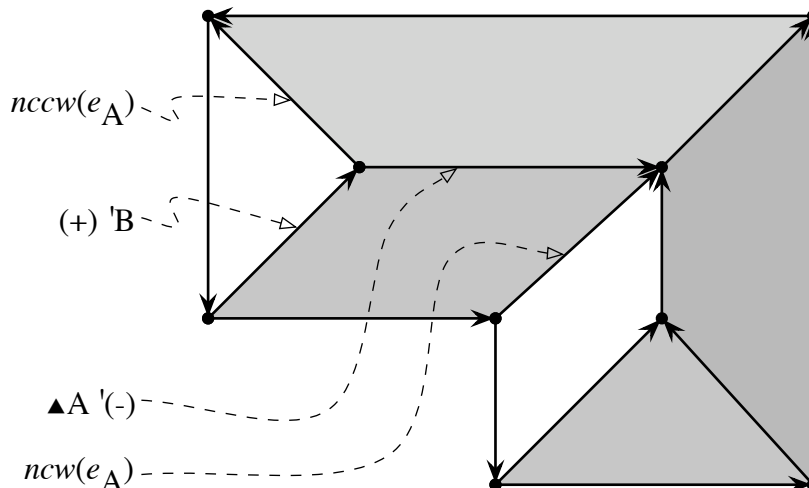
## Original



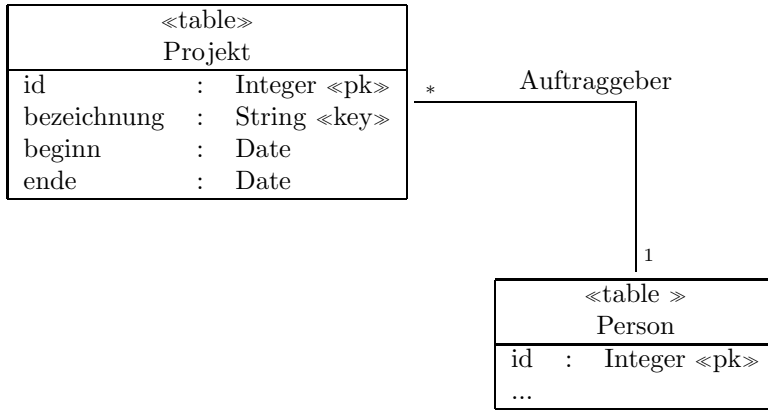
## Example A



## Example B



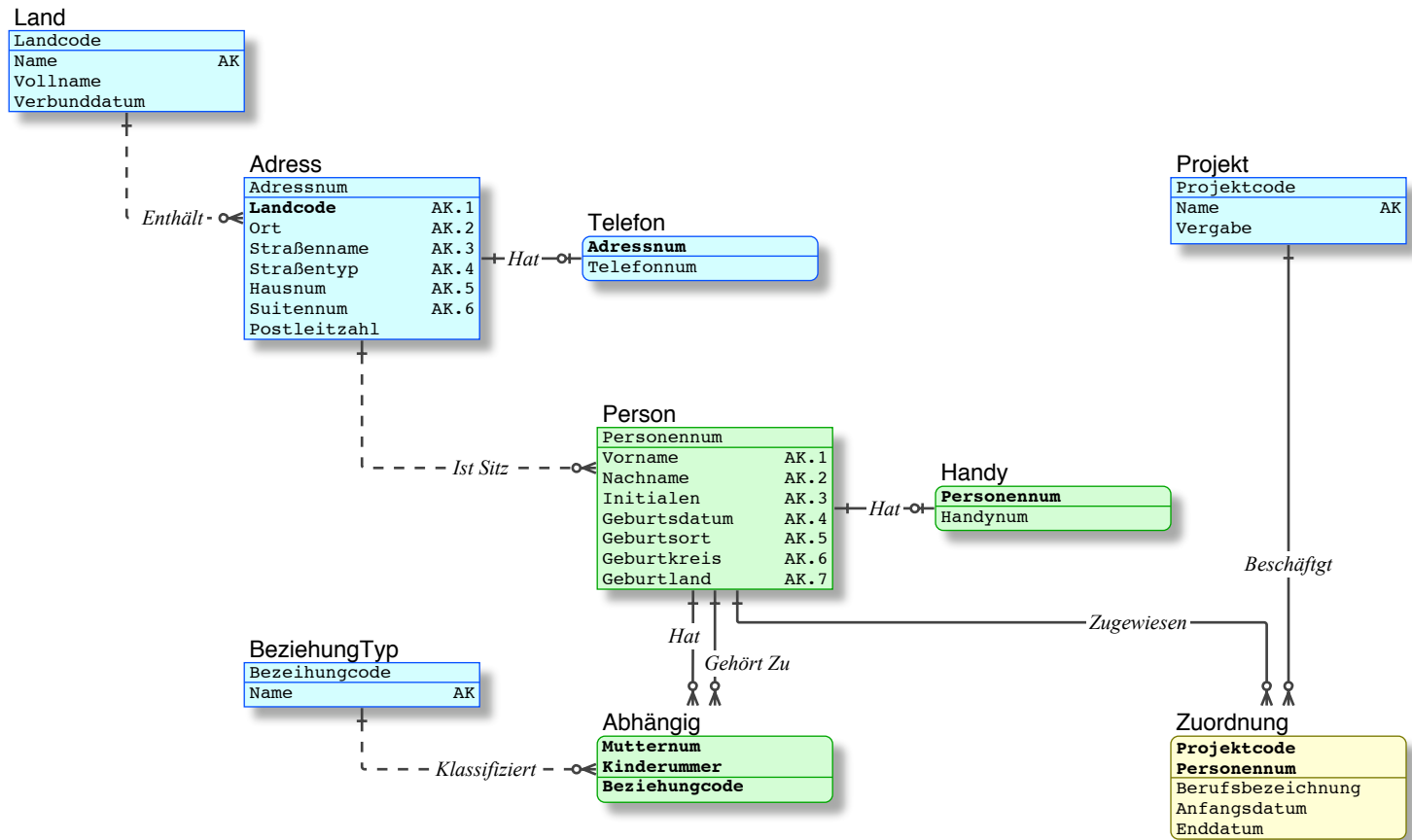
Non-relational, UML, Etc



```

create table Adressen(
personennummer integer not null
, strasse char(32) not null
, hausnummer char(8) not null
, plz char(8) not null
, ort char(32) not null
, telefonnummer char(32)
, handynummer char(32)
, primary key(personennummer)
...
);
    
```

Relational, IDEF1X, Hide Domain, Etc



Show Domain/Logical

Adressnum	Adressnum	
Landcode	Landcode	AK.1
Ort	_Name	AK.2
Straßename	_Name	AK.3
Straßentyp	_Code2	AK.4
Hausnum	_Code5	AK.5
Suitenum	_Code3	AK.6
Postleitzahl	_Int	

- Every Relational Key has its own Datatype, and every reference uses it
- Non-keys use a set of generic Datatypes

Show Domain/Physical

Adressnum	INTEGER	
Landcode	CHAR(2)	AK.1
Ort	CHAR(32)	AK.2
Straßename	CHAR(32)	AK.3
Straßentyp	CHAR(2)	AK.4
Hausnum	CHAR(5)	AK.5
Suitenum	CHAR(3)	AK.6
Postleitzahl	INTEGER	