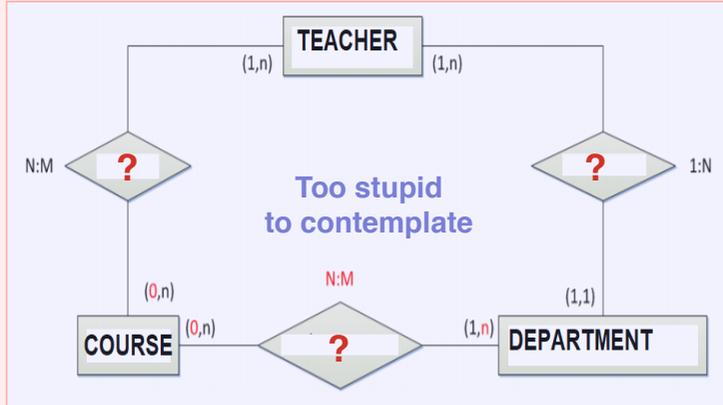
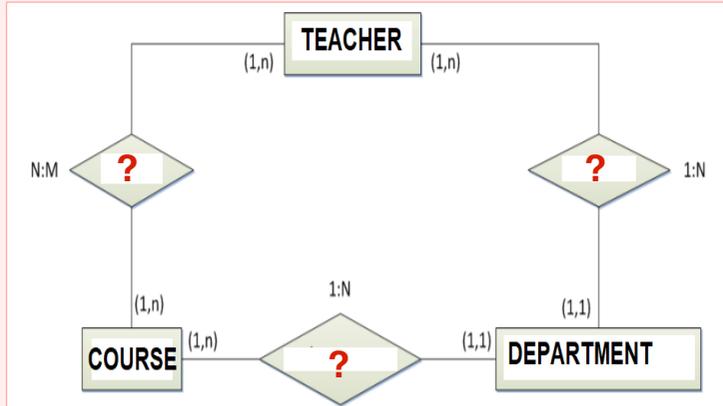


ERD (Obsolete in 1983)



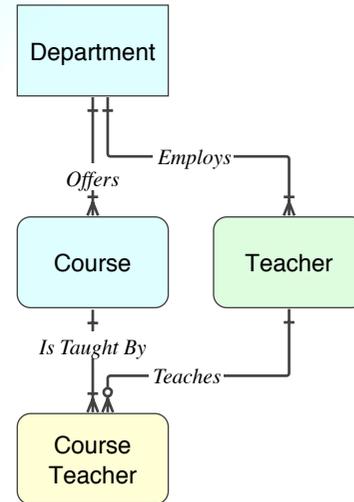
Too stupid to contemplate

- Really. Since when can a Course be taught by more than one Department or Faculty.

- Entity Type
- Reference/Major
 - Reference/Simple
 - Identifying
 - Transaction, Binary
 - TransactionDetail

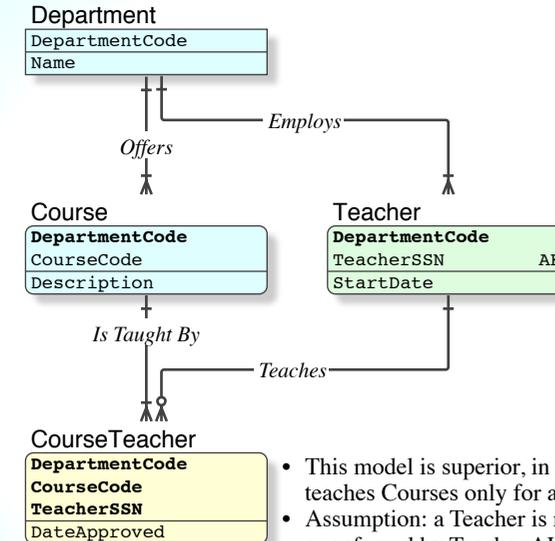


IDEF1X • Entity Level



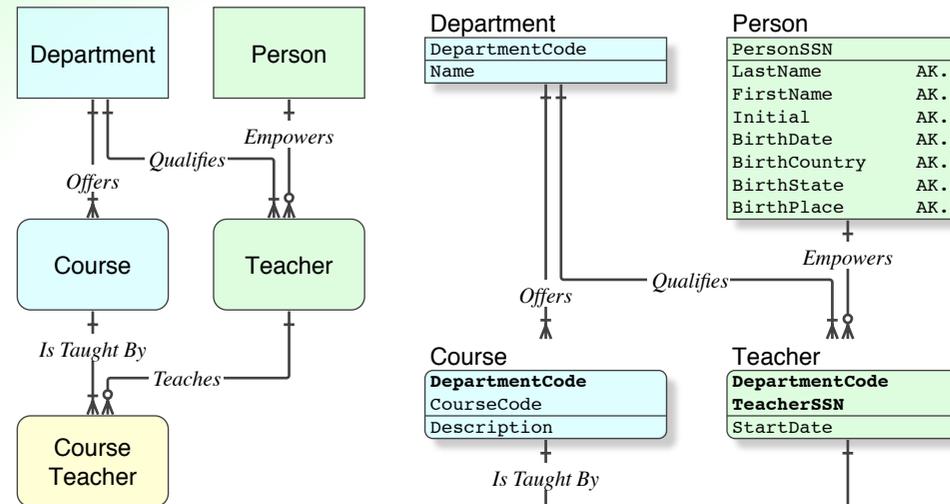
- IDEF1X demands the distinction of entities, into Independent vs Dependent
- Dependence (ownership) is denoted by an Identifying relation (solid line)
- Thus a dashed line denotes a Non-Identifying relation.

IDEF1X • [Key &] Attribute Level



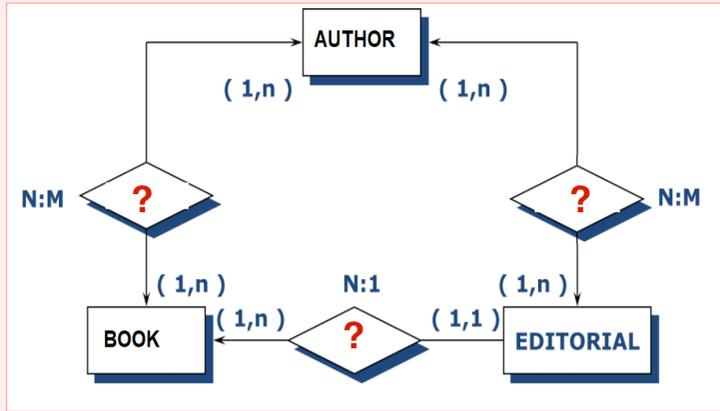
- This model is superior, in that it ensures that a Teacher teaches Courses only for a Department that he is registered in
- Assumption: a Teacher is registered to one Department only
 - enforced by Teacher.AK
 - to allow a Teacher to work for more than one Department, simply remove the AK

For Understanding, Beyond the Exercise

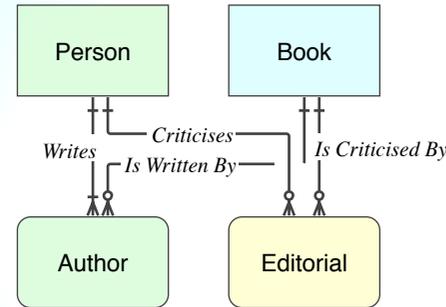


- This model renders the facts in the real world, more correctly than the one prior, which is the minimum to satisfy the exercise
- Department and Person exist Independently.

ERD (Obsolete since 1983)



IDEF1X



Person	
PersonId	
LastName	AK.1
FirstName	AK.2
Initial	AK.3
BirthDate	AK.4
BirthCountry	AK.5
BirthState	AK.6
BirthPlace	AK.7

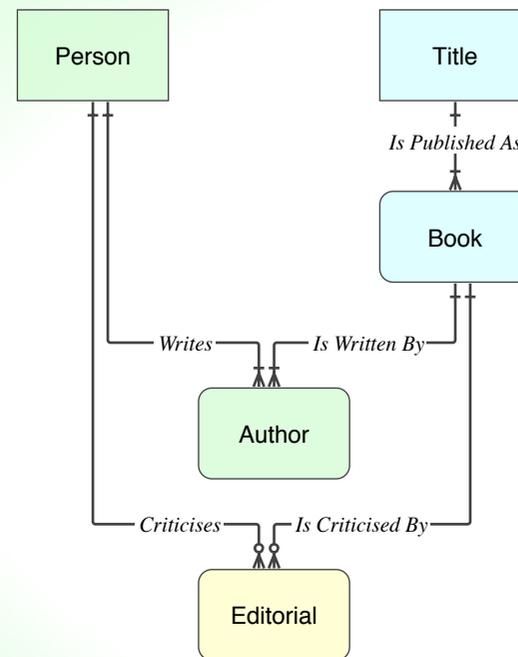
Book	
Title	
Description	
PublicationDate	

Author	
Title	
AuthorId	

Editorial	
Title	
EditorId	
EditorialDate	

- The minimum required for the exercise
- An Editorial cannot exist without a Book, nor without a Person, thus it is Dependent on both.

For Understanding, Beyond the Exercise



Person	
PersonId	
LastName	AK.1
FirstName	AK.2
Initial	AK.3
BirthDate	AK.4
BirthCountry	AK.5
BirthState	AK.6
BirthPlace	AK.7

Title	
Title	
Description	
PublicationDate	

Book	
Title	
Version	
PublicationDate	

Author	
Title	
Version	
AuthorId	

Editorial	
Title	
Version	
EditorId	
EditorialDate	

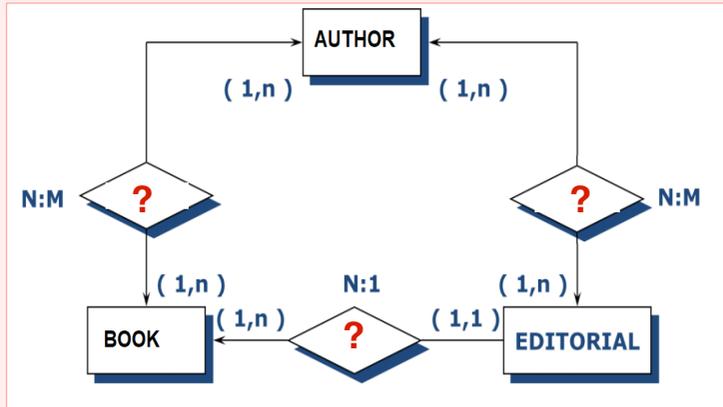
Contribution

- A bit more real world
- This registers the [actual] facts that occur in reality
- The relation Book::Editorial in the broken ERD is Book::Person here
- Nicola's concept of **Contribution** is a View, not a separate fact.

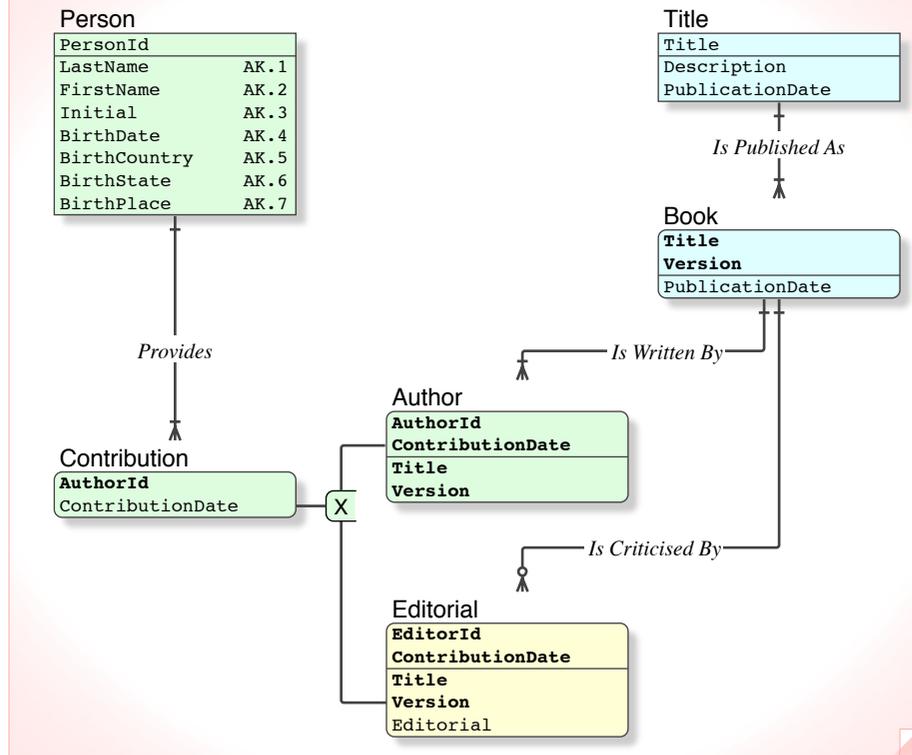
Entity Type

- Reference/Major
- Reference/Simple
- Identifying
- Transaction, Binary
- TransactionDetail

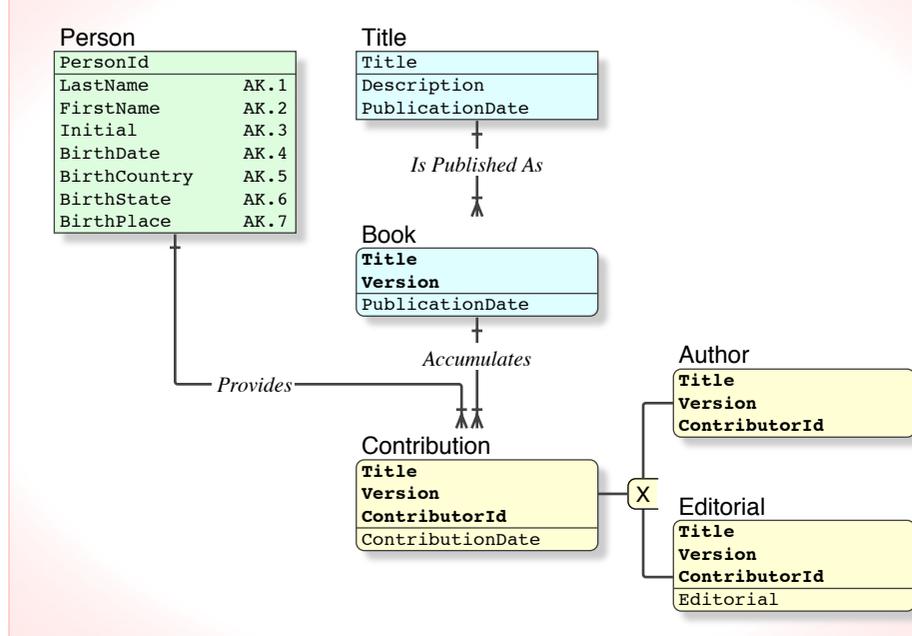
ERD (Obsolete since 1983)



Contribution [Author-centric]



Contribution [Book-centric]



- Entity Type
- Reference/Major
 - Reference/Simple
 - Identifying
 - Transaction, Binary
 - TransactionDetail