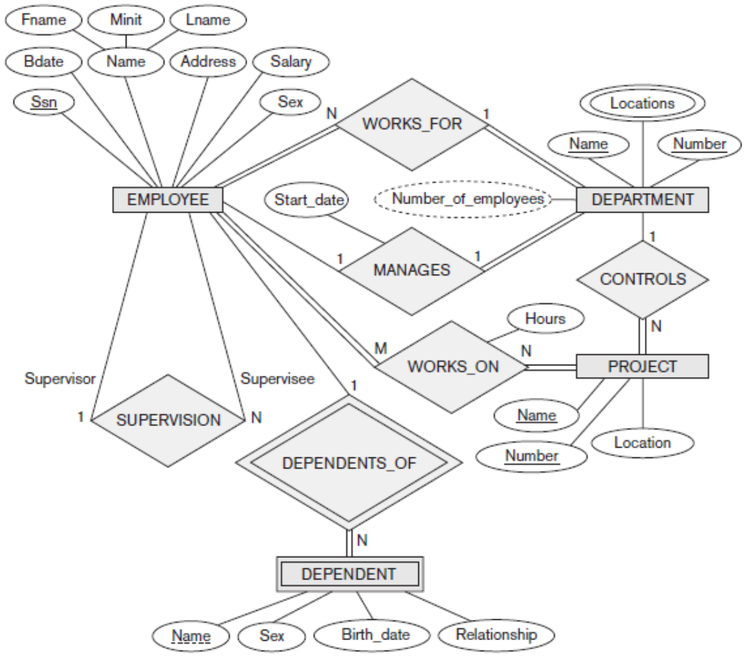
Relation Schema
R(A1, A2, ..., Am)

Relational Database Schema
S = {R1, R2, ..., Rm}
IC

Relation State
r(R) = {t1, t2, ..., tm}

Relational Database State
DB = {r1, r2, ..., rm}
that satisfy the constraints in IC

Conceptual Model



Logical / Implementation Model

Step 1 - Strong Entity Types

EMPLOYEE

Ssn	FName	MInit	LName	Address	Salary	BDate	Sex

DEPARTMENT

Number	Name	ManagerSsn	StartDate

DEPENDENT

Name	Sex	BirthDate	Relationship	Ssn

Step 2 - Weak Entity Types

Foreign Key Approach (Step 3)

PROJECT

Number	Name	Location

Step 3 - Binary 1:1 Relationship Types

Cross Referenced Relation Approach (Step 3)

MANAGES

Ssn	DeptNumber	StartDate

(We didn't take this approach Foreign Key Preferred*)