

# Knowledge bases

Natural language questions are mapped to a query language via syntactic parsing

Most knowledge bases use relations between entities, stores *triples*

*Triple:*

- \* Subject, predicate, object
- \* Subject, property (relation), object
- \* Entity, relation, entity

Popular KBs:

- \* Freebase (deprecated)
- \* Wikidata (new freebase)
- \* DBpedia
- \* YAGO



# Knowledge bases ... Graph structure

## Entity-Relation model

- \* Entity: a graph node
  - \* Subject
  - \* Object
  - \* Compound Value Type (CVT)
    - \* Many-to-many relation
- \* Relation: a graph edge
  - \* Often context specific

