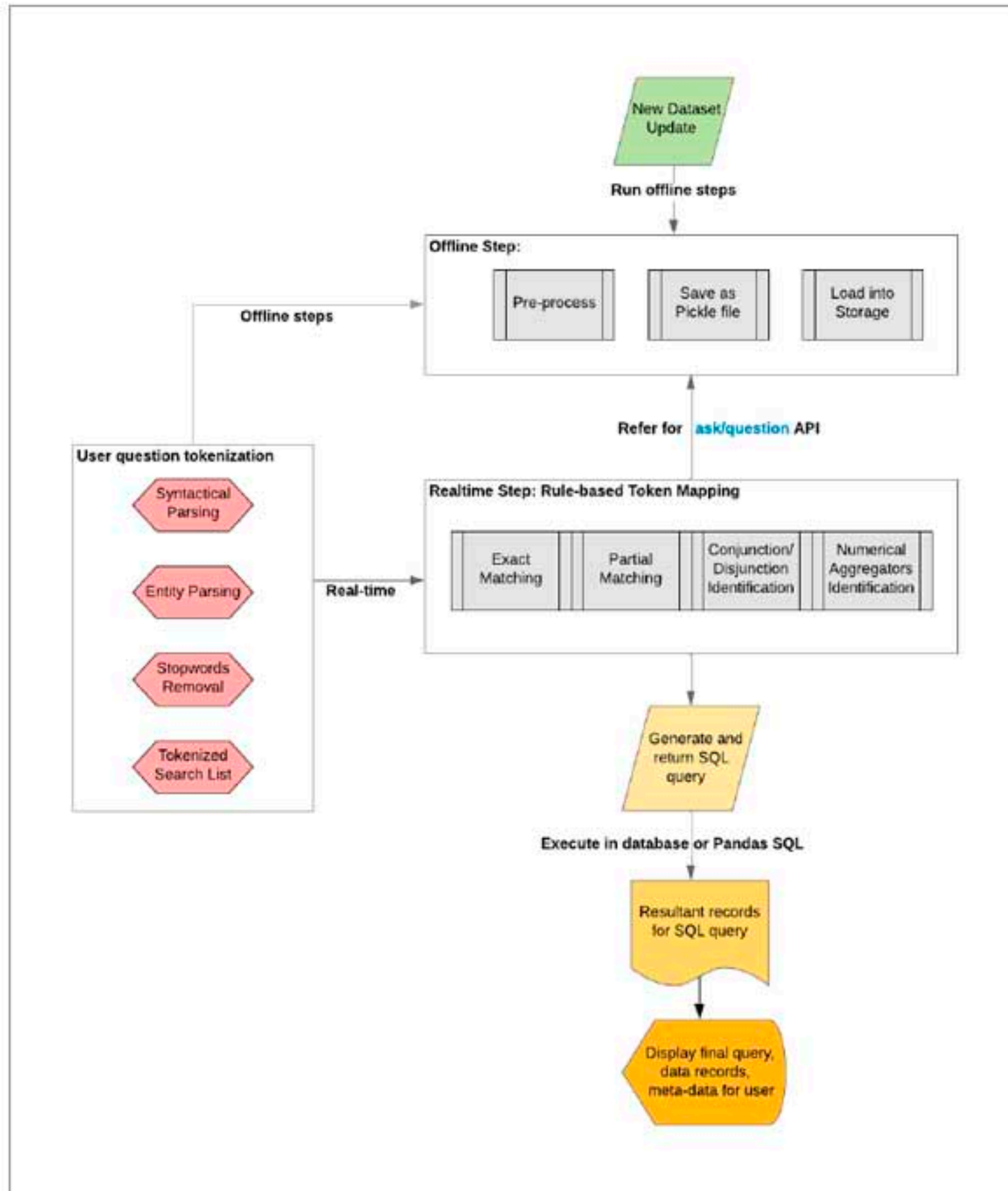# E.g., Mapping natural language onto SQL

Q1: **"Show all cases in Beijing from 3 months ago"** would translate to –

```
SELECT * FROM data
WHERE ((LastUpdate LIKE '%2021-02%'
    OR ObservationDate LIKE '%2021-02%')
    AND Province_State LIKE '%Beijing%');
```
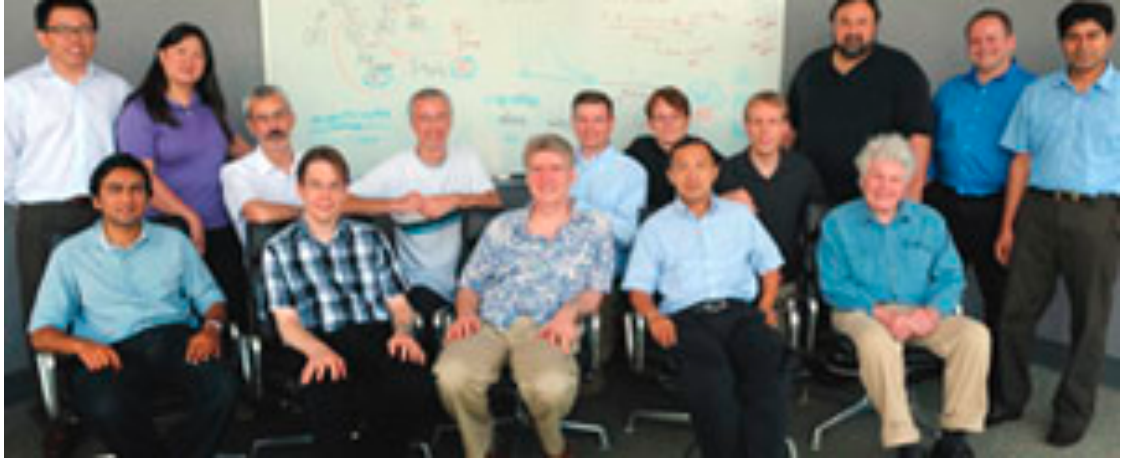
Q2: **"Show average of Recovered in %Mainland China%"** would translate to:

```
SELECT AVG(Recovered) AS AVG_OF_COLUMN
FROM data
WHERE Country_Region = 'Mainland China;
```

Q3: **"Tell me the details about Tibet and %Mainland China%"** would translate to:

```
SELECT *
FROM data
WHERE Province_State = 'Tibet'
    AND (Country_Region ='Mainland China')
```

Figures from Intelligent

DeepQA ... i.e., IBM Watson

Figure 1

DeepQA architecture.

Clue: Chile shares its longest land border with this country.

Bolivia is more Popular due to a commonly discussed border dispute. But Watson learns that Argentina has better evidence.
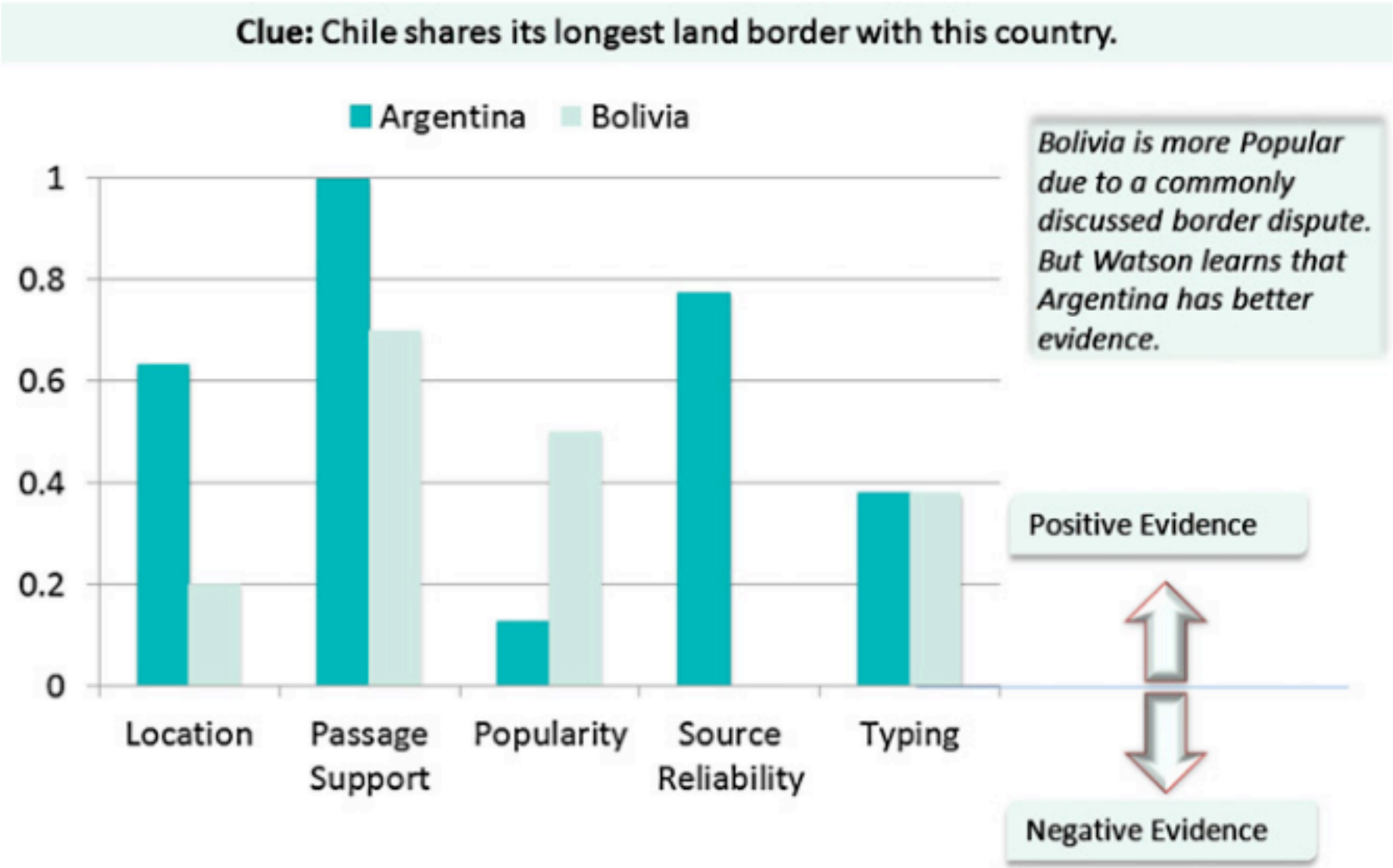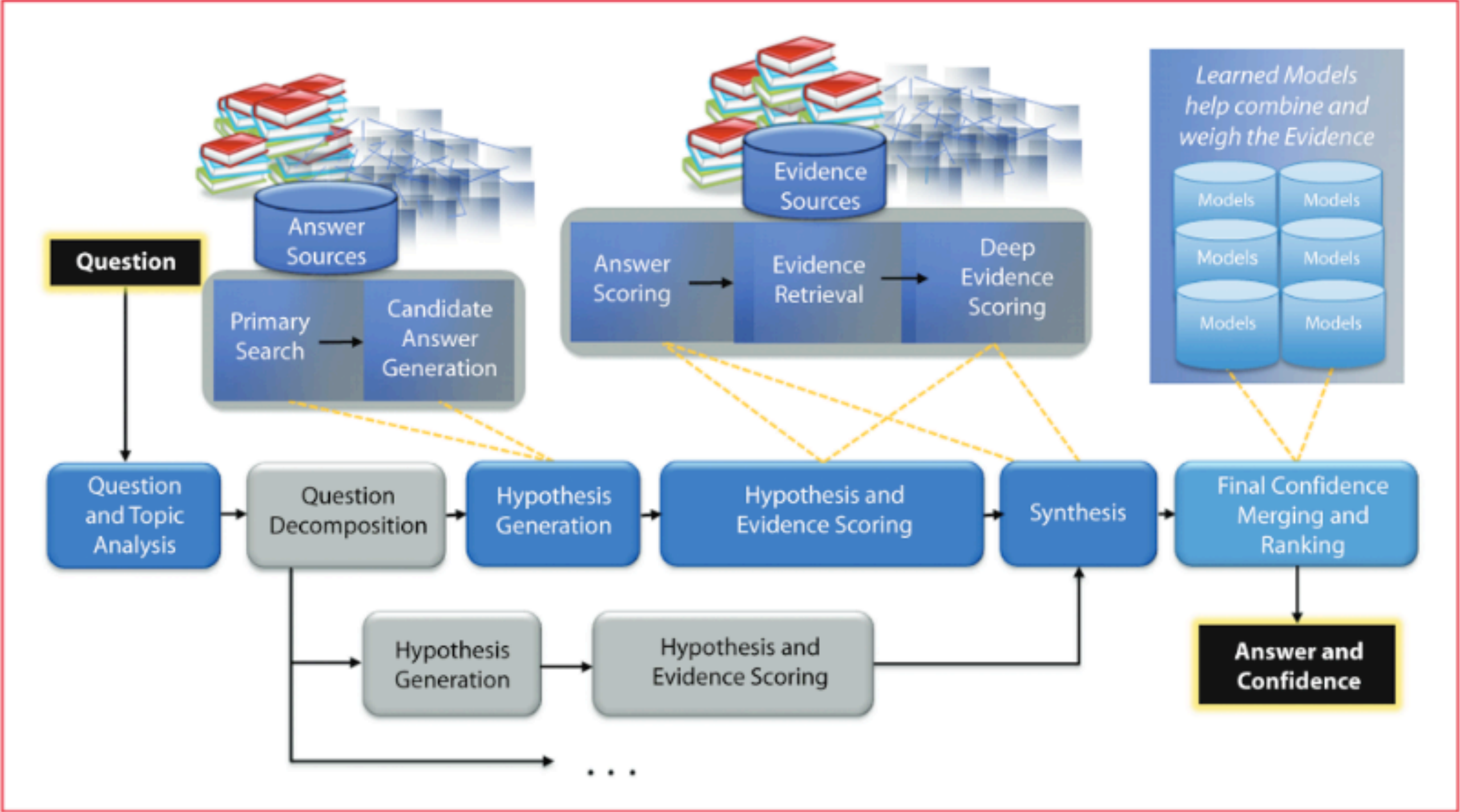
Fig. 2. Dimensions of evidence defined for Jeopardy!

Figures from Ferrucci et al., 2011