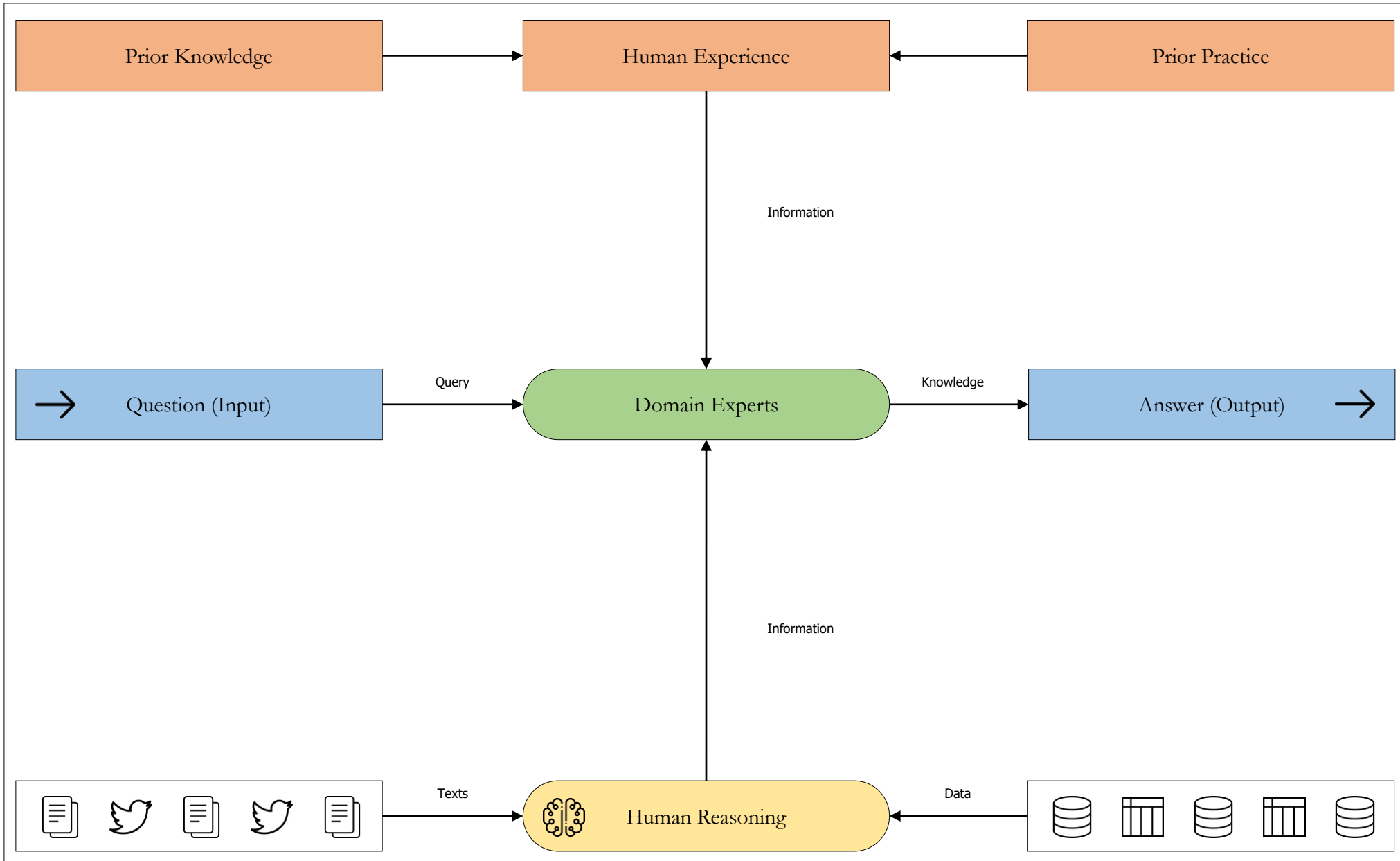


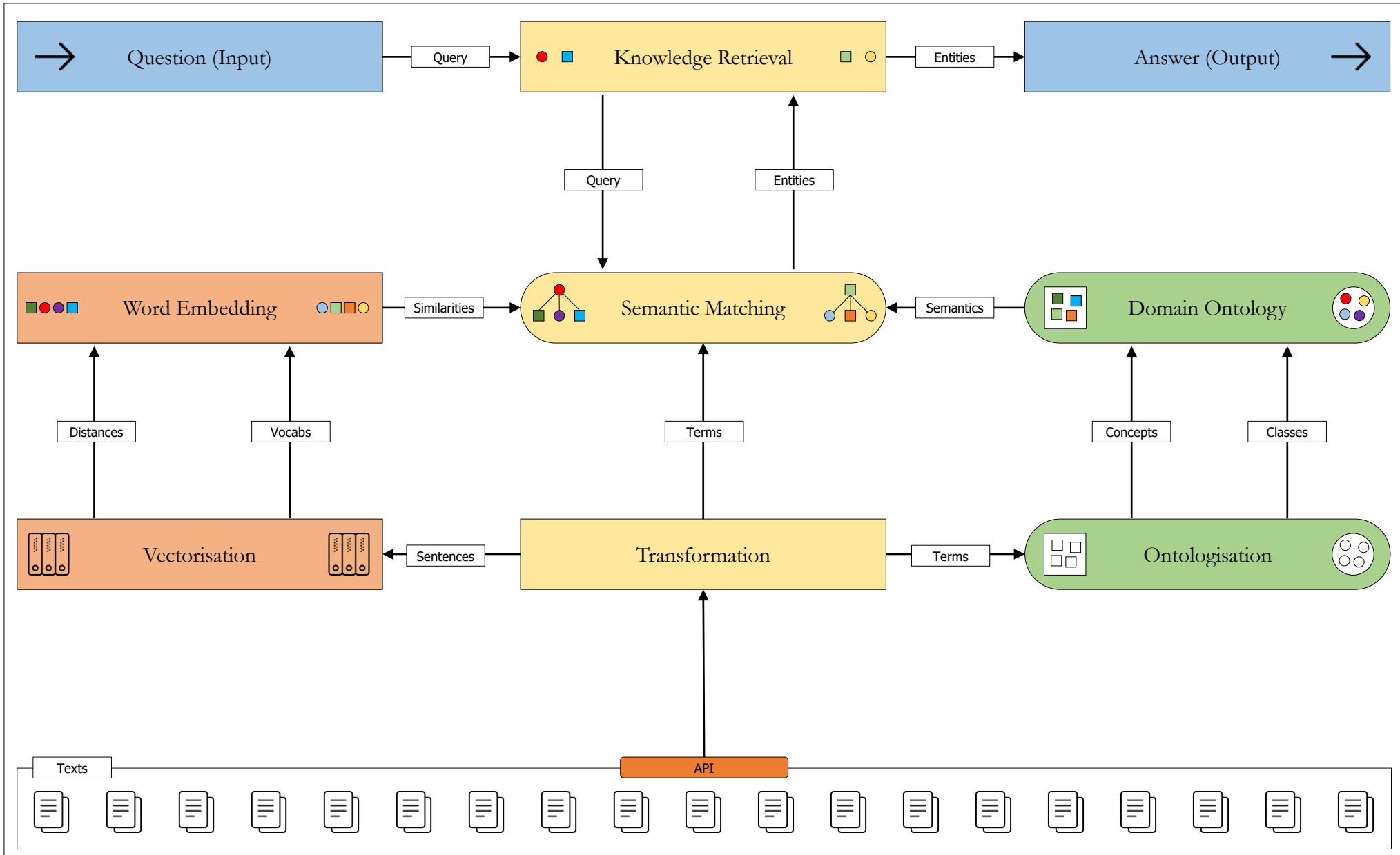
# Semantic Representation Framework

# Domain Experts



# Semantic Representation Framework

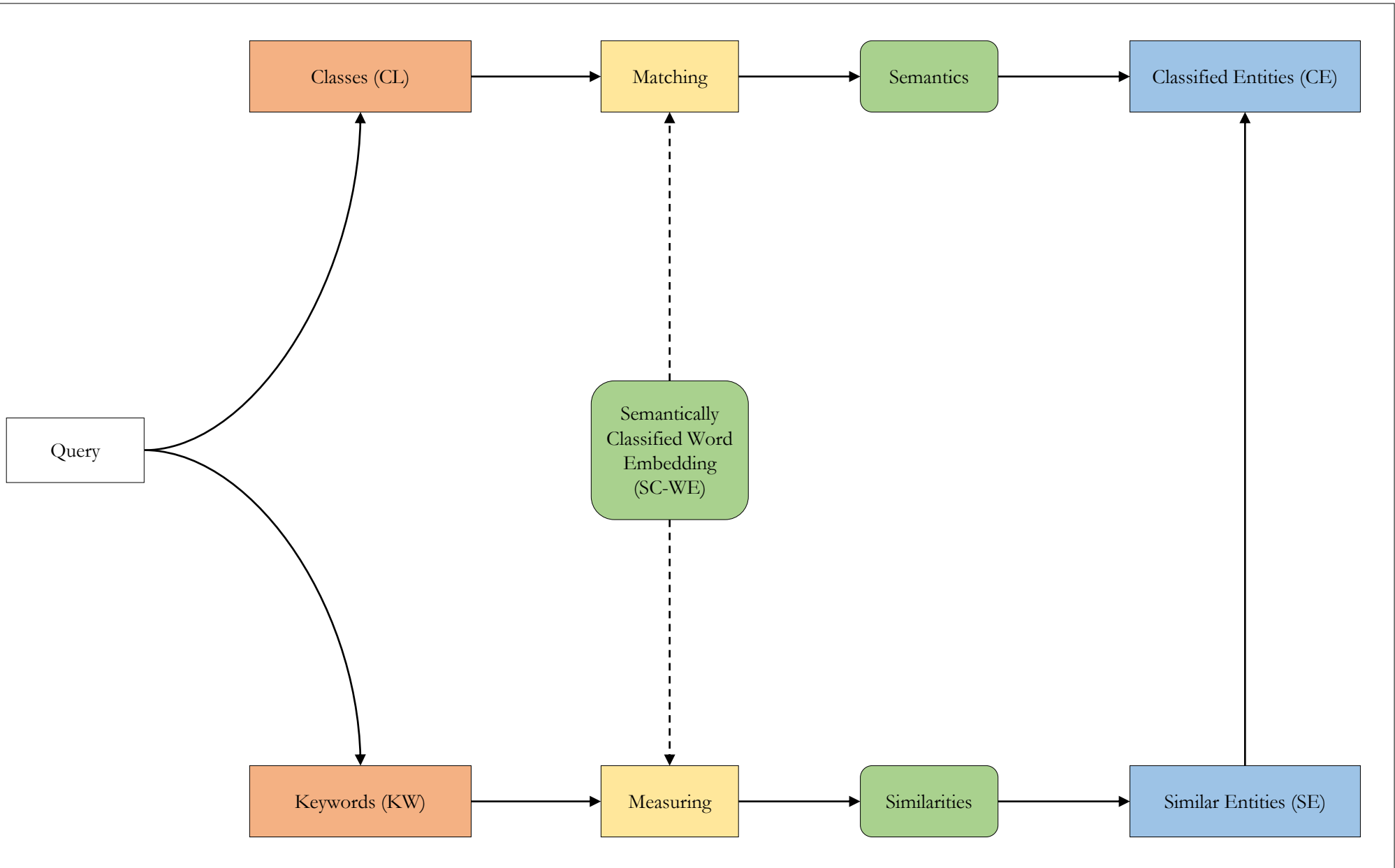
# Proposed Framework

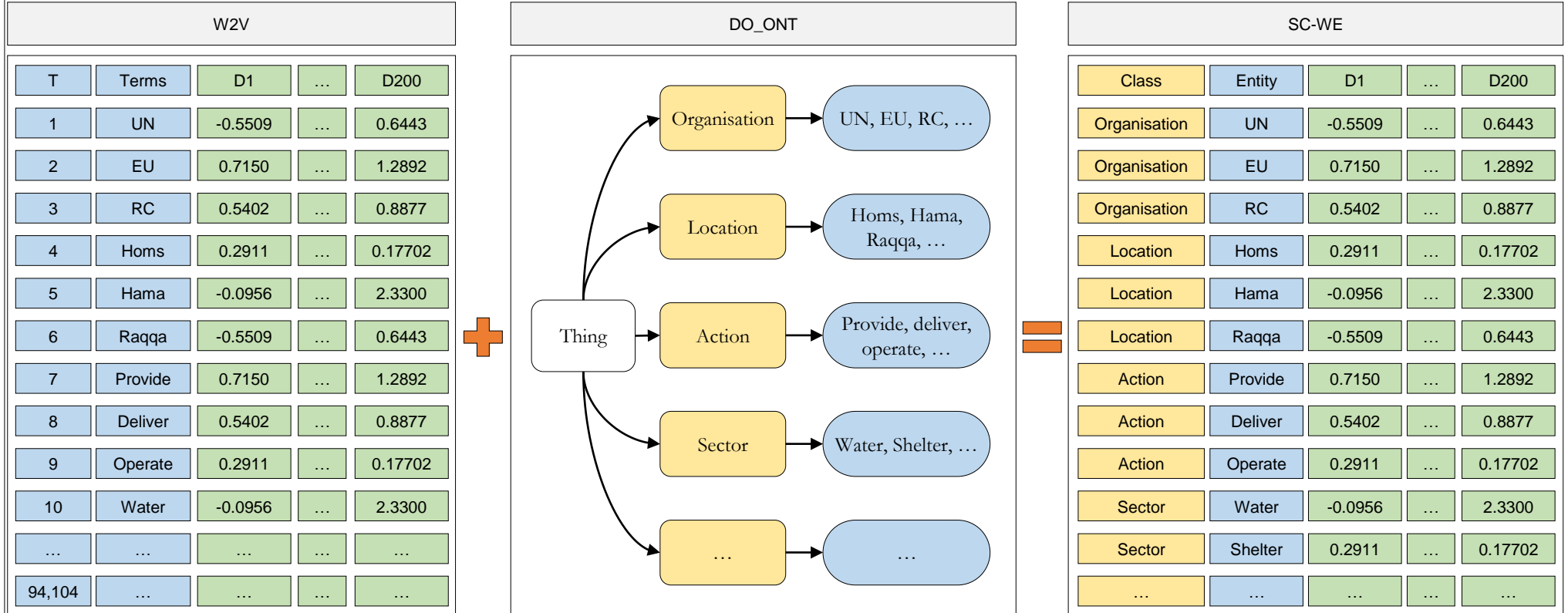


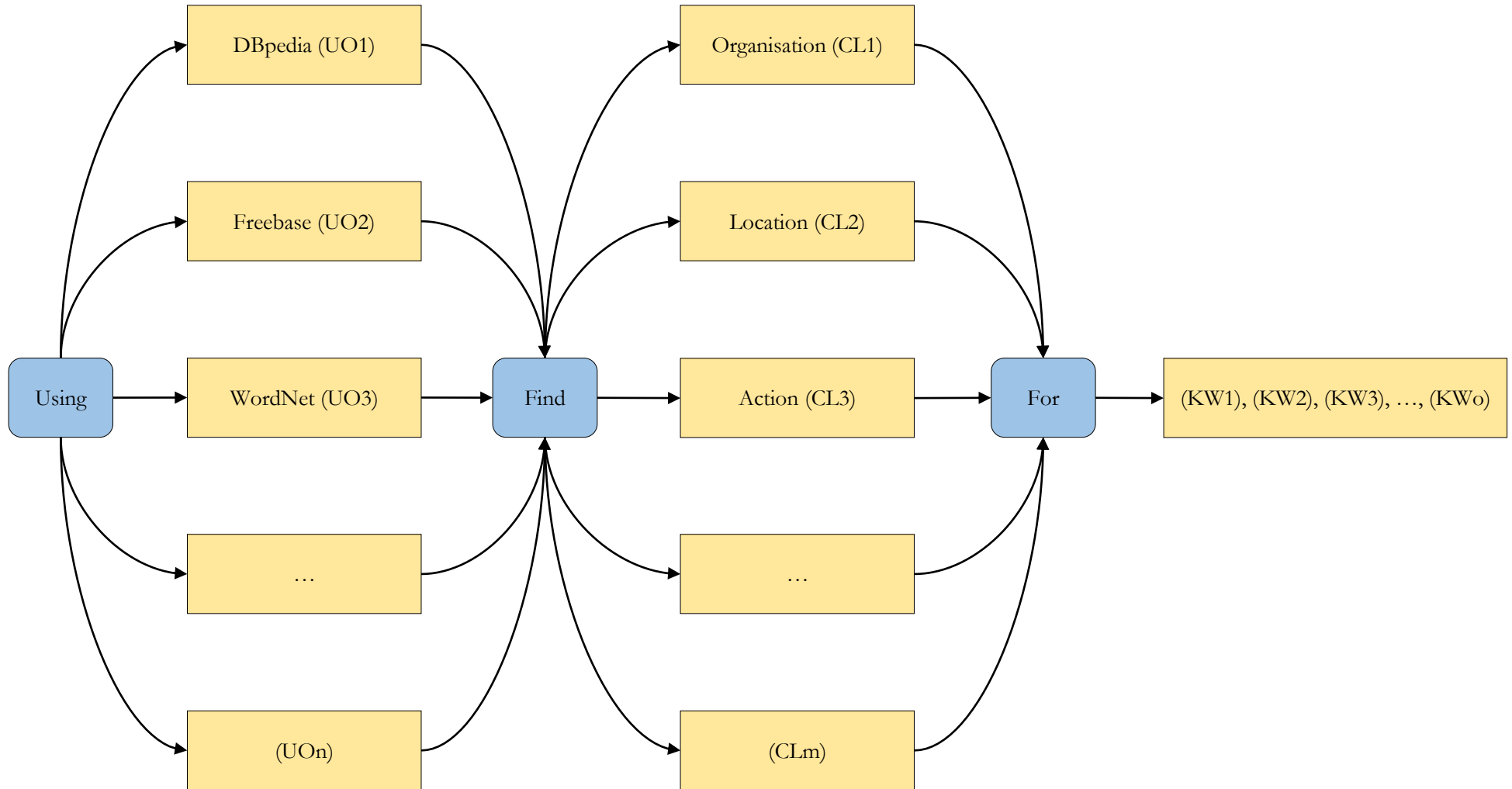


# Semantic Representation Framework

# Knowledge Retrieval







Q1

ScWeQL >>> Using (DBpedia) Find (\*) For (Countries, Syrian, Refugees, Seek, Asylum) Limit (5)

Q2

ScWeQL >>> Using (DBpedia) Find (Location) For (Countries, Syrian, Refugees, Seek, Asylum) Limit (5)

| SE (KW)         | Similarity | Frequency | CE (KW + CL) | Similarity | Frequency |
|-----------------|------------|-----------|--------------|------------|-----------|
| Syrians         | 0.64       | 3661      | Greece       | 0.55       | 815       |
| Syrian Refugees | 0.60       | 1715      | Germany      | 0.46       | 1403      |
| Asylum Seekers  | 0.58       | 493       | Turkey       | 0.45       | 7358      |
| Migrants        | 0.57       | 940       | Europe       | 0.45       | 3485      |
| Seekers         | 0.56       | 8         | Italy        | 0.44       | 490       |

Q1

ScWeQL >>> Using (DBpedia) Find (\*) For (Organisation, Provide, Medical Aid, Syrian) Limit (5)

Q2

ScWeQL >>> Using (DBpedia) Find (Organisation) For (Organisation, Provide, Medical Aid, Syrian) Limit (5)

| SE (KW)                    | Similarity | Frequency | CE (KW + CL)            | Similarity | Frequency |
|----------------------------|------------|-----------|-------------------------|------------|-----------|
| Providing Humanitarian     | 0.58       | 44        | SARC                    | 0.50       | 51        |
| Communications Equipment   | 0.56       | 21        | UNRWA                   | 0.50       | 109       |
| Humanitarian Organisations | 0.56       | 83        | Red Cross               | 0.49       | 352       |
| Relief Organisations       | 0.56       | 16        | Works Agency            | 0.49       | 25        |
| Child Protection           | 0.56       | 31        | International Committee | 0.48       | 149       |



Q1

ScWeQL >>> Using (DBpedia) Find (\*) For (Happened, Eastern Aleppo, 2016) Limit (5)

Q2

ScWeQL >>> Using (DBpedia) Find (Action) For (Happened, Eastern Aleppo, 2016) Limit (5)

| SE (KW)        | Similarity | Frequency | CE (KW + CL)    | Similarity | Frequency |
|----------------|------------|-----------|-----------------|------------|-----------|
| This Year      | 0.58       | 996       | Clashes Erupted | 0.50       | 12        |
| Eastern Ghouta | 0.57       | 249       | Heavy Fighting  | 0.49       | 86        |
| East Aleppo    | 0.57       | 237       | Reconvening     | 0.49       | 3         |
| Next Year      | 0.57       | 210       | Be Replicated   | 0.47       | 11        |
| March 2011     | 0.55       | 216       | Heavy Shelling  | 0.46       | 48        |

Q1

ScWeQL >>> Using (DBpedia) Find (\*) For (Chemical, Attack, Took Place, Syria) Limit (5)

Q2

ScWeQL >>> Using (DBpedia) Find (Location) For (Chemical, Attack, Took Place, Syria) Limit (5)

| SE (KW)         | Similarity | Frequency | CE (KW + CL)     | Similarity | Frequency |
|-----------------|------------|-----------|------------------|------------|-----------|
| 21 August       | 0.65       | 266       | Ghouta           | 0.56       | 283       |
| Chemical Attack | 0.64       | 437       | Houla            | 0.53       | 175       |
| Gas Attack      | 0.59       | 74        | Eastern Ghouta   | 0.53       | 249       |
| Chlorine        | 0.56       | 143       | Khan Sheikhun    | 0.52       | 120       |
| Civilian Areas  | 0.56       | 127       | Damascus Suburbs | 0.51       | 103       |

Q1

ScWeQL >>> Using (DBpedia) Find (\*) For (United Nations, Doing, Syria) Limit (5)

Q2

ScWeQL >>> Using (DBpedia) Find (Action) For (United Nations, Doing, Syria) Limit (5)

| SE (KW)          | Similarity | Frequency | CE (KW + CL) | Similarity | Frequency |
|------------------|------------|-----------|--------------|------------|-----------|
| Inside Syria     | 0.42       | 753       | Facilitating | 0.38       | 53        |
| Humanitarian     | 0.39       | 1813      | Securing     | 0.35       | 214       |
| Humanitarian Aid | 0.39       | 496       | Coordinating | 0.35       | 97        |
| Facilitating     | 0.38       | 53        | Establishing | 0.35       | 209       |
| European Union   | 0.37       | 368       | Ongoing      | 0.35       | 527       |