

Chapter IR:VI

VI. Users and Queries

- ❑ Information Needs and Queries
- ❑ Query Transformation and Refinement
- ❑ Cross-Language Search

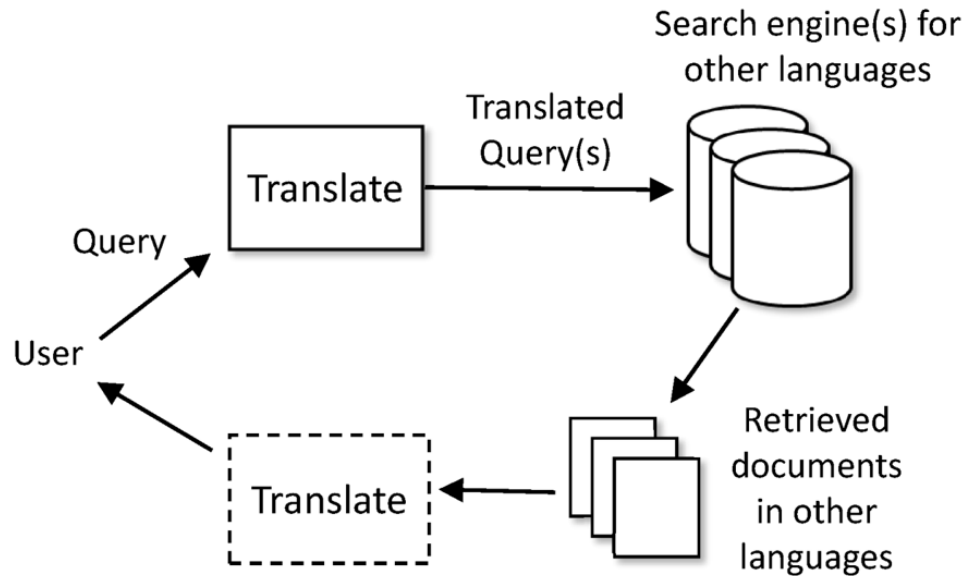
Cross-Language Search

Goals

- ❑ Query in one language, retrieve documents in multiple other languages
- ❑ Involves query translation, and probably document translation
- ❑ Query translation can be done using bilingual dictionaries
- ❑ Document translation requires more sophisticated statistical translation models
 - Similar to some retrieval models
 - To ensure grammatical correctness

Cross-Language Search

Basic Approach



Cross-Language Search

Translation

- ❑ Web search engines also use translation

- E.g. for query `pecheur france`

Le pêcheur de France archives @ peche poissons - [Translate this page]

Le **pêcheur** de **France** Les média Revues de pêche Revue de presse Archives de la revue
Le **pêcheur** de **France** janvier 2003 n°234 Le **pêcheur** de **France** mars 2003 ...

- Translation link translates web page
- Uses statistical machine translation models
 - Choose most likely translation
 - Not perfect but usually good enough to “get some idea”