Multilingual Search

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Existing Work in CLIR

- **Query Translation**

- **Document Translation**

- **No translation** – cognate matching, transliteration

- **Interlingual Techniques** (LSI[5], decipherment)

Existing Work in CLIR (Contd.)

- **Query Stemming** – before/after translation

- **Translation Knowledge** – Bilingual Dictionaries (online, offline)[1], Parallel Corpora, the Web[6]

- **Translation Disambiguation** – word co-occurrence statistics, translation probability, POS tags, user and pseudo relevance feedback and user-assisted translation, structured queries[9], bi-directional translation, using web resources[11, 12]

- **Evaluation** – TREC CLIR track, NTCIR, TDT, CLEF

Existing Work in CLIR (Contd.)

- **Ranking** – vector space model, language model

- **Pivot Language (Triangulation) Approach**[8]

- **Named Entity Extraction and Translation**[7]

CyDAR – Basic Premises and Requirements

- Corpus is in Ancient Greek
- Query might be in English, Modern Greek or Ancient Greek

Issues

- Unit of Retrieval (Pages? Part of a page? Paragraphs?)

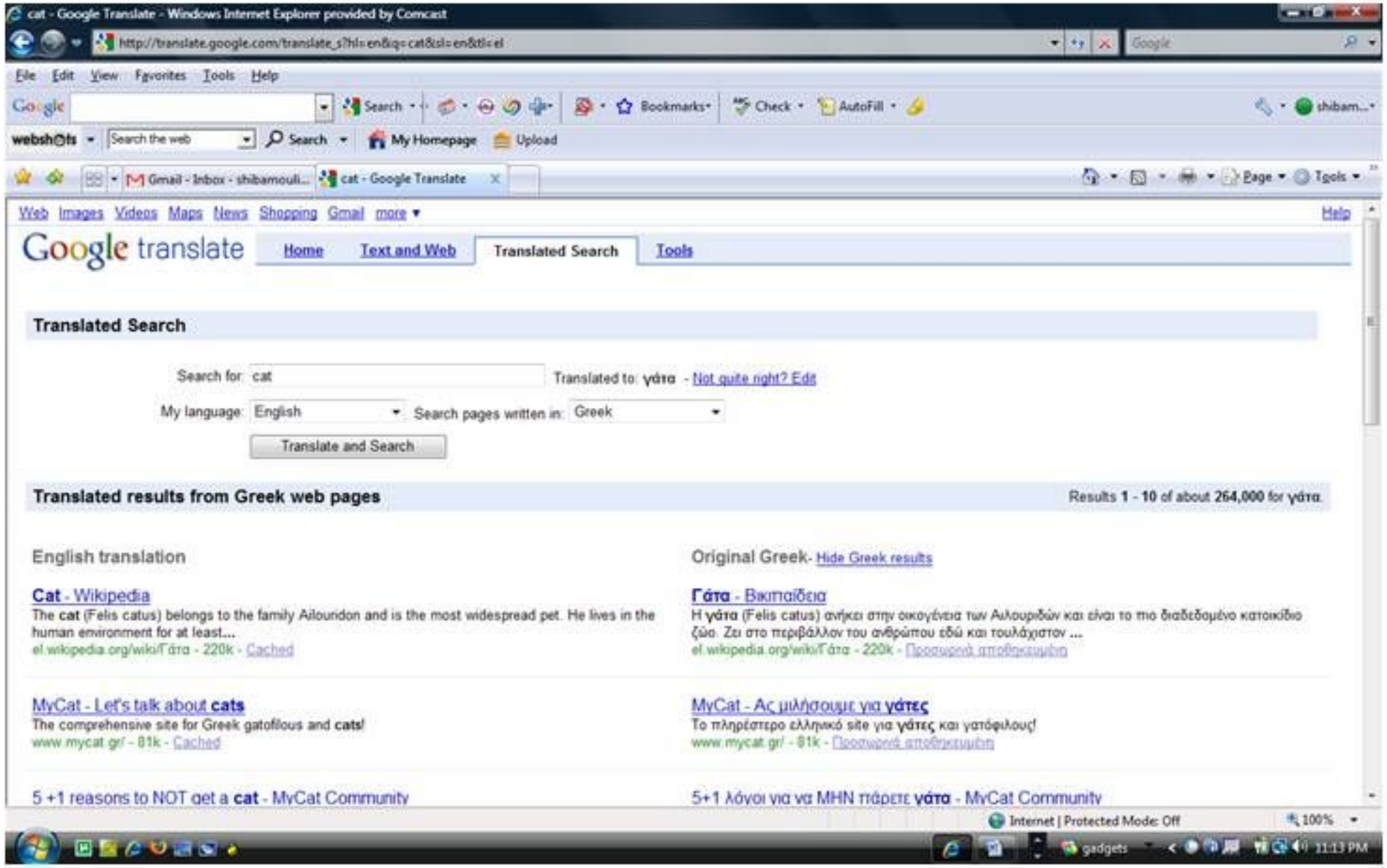
- An intelligible summary, preferably in all three languages

- Ranking

- Evaluation

- Query and translation disambiguation

User Interface Example



Lexicon

- Lexilogos

- Kypros (also offers Ancient Greek)

Parallel Corpora

- Perseus Project has English ←→ Ancient Greek and English ←→ Latin

- Europarl

- ELRA (European Language Resources Association)

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Thank you!