BIG MULTILINGUAL TERMINOLOGICAL DATA SPACE
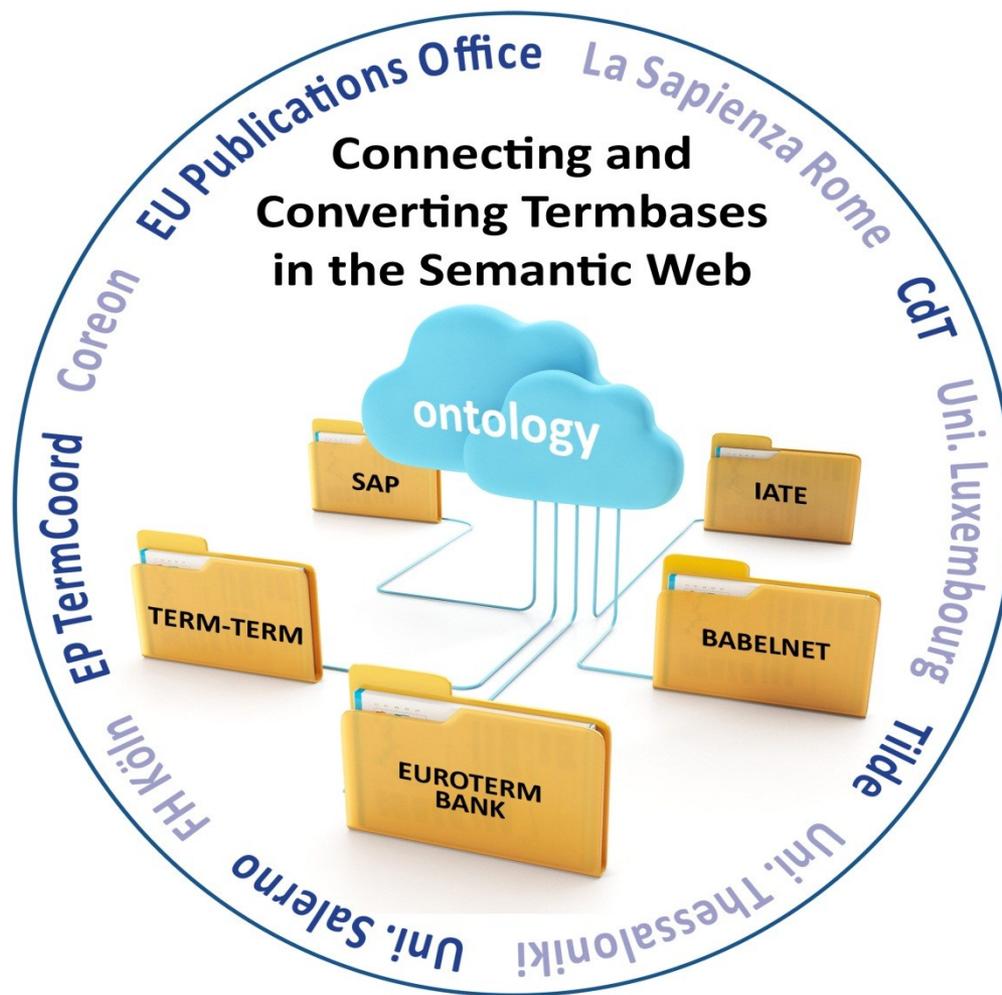
Riga Summit – 29 April 2015

Partners of the project
Big Multilingual Terminological Data Space

A common ontology..

- ..converts terminology databases
- (explanation by Roberto)

A metasearch engine

(explanation by Roberto)

Language barriers in EU

- It is a fact that the European Union is made up of 28 member states and EU citizens have the privilege to commute from one state to another without major issues **except from the possible language barriers**, as there are 24 official languages.

Online information access

Online information access can sometimes be cumbersome.

Multilingual information clearly limits the amount and type of information that certain user can access.

Monolingual Search Engines

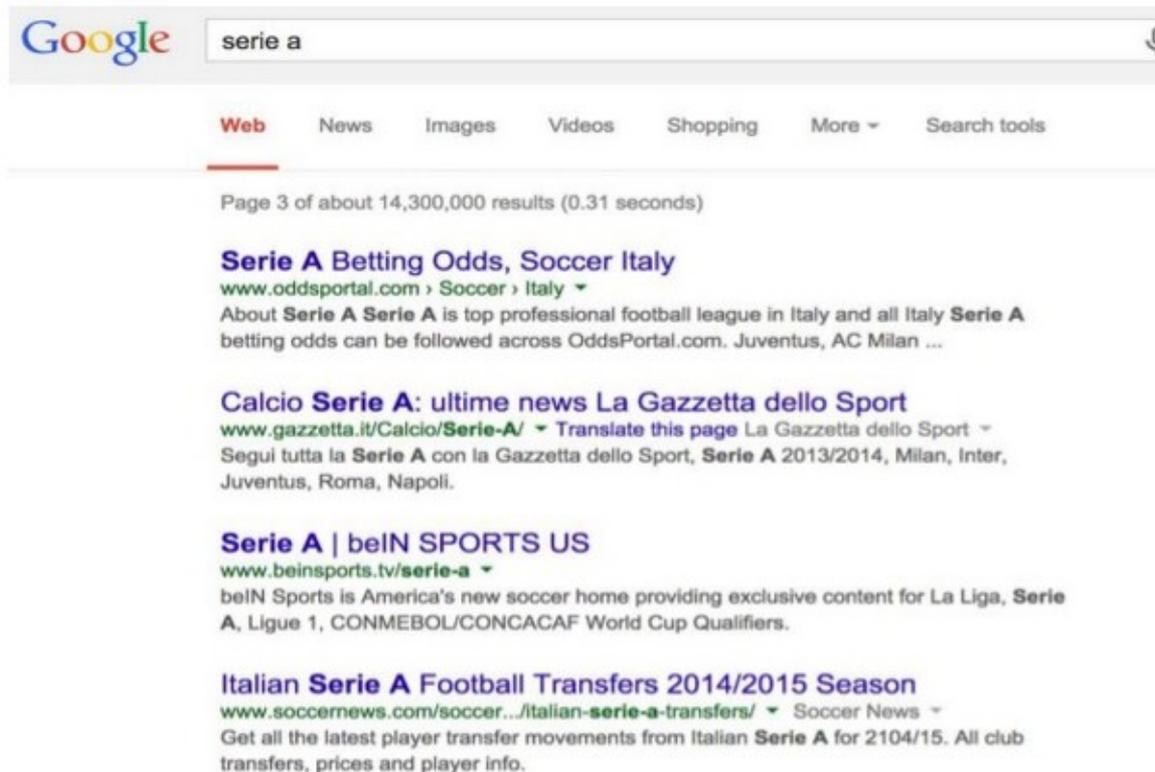**Search engines** in use today are mostly monolingual.

They allow users to enter a search query in one language but the **results are given only for that same and only language**.

Open-door access to information

- It is self-explanatory in this "**open-door**" context of the EU that users need **access to information in any of these 24 languages** no matter in which language a query is done.

A Multilingual Search Example

APPLICATION SCENARIOS

Application scenarios of the multilingual search Engine

Cross–language search

A **cross–language search service** could be an effective mean for accessing in the unstructured big data, information in an unconventional but logical way:

- **Enter a query X in one official EU language and get results in one of the other 23 official EU languages.**

Application scenarios

Thematic cross-lingual search engine

- The labour market domain can be a sector of application of the cross-lingual thematic search engine.

- In an ideal scenario, such a terminology tool can enable EU citizens to seek online for jobs (domain of interest: labour market > job mobility, job vacancy) in a language barrier-free environment.

2lingual

cameriere lavoro   2lingual Google Search

                                                    powered by Google™

Search pages written in: [Italian ▾] and [Greek ▾]

176000 Italian results for **cameriere lavoro**

Lavoro - Cameriere, Offerte **lavoro** | Indeed.com
Trova **lavoro**: **Cameriere** su Indeed.com. una ricerca. tutti i lavori. Cerca il tuo
lavoro ideale tra più di 300.000 offerte di **lavoro** pubblicate da portali **lavoro**, ...
it.indeed.com/offerte-**lavoro**-**Cameriere**

Cameriere - **Lavoro** - Kijiji: Annunci di eBay
4751 offerte di **lavoro** e richieste di impiego: trova **lavoro** su Kijiji. Trovi
anche **cameriere**.
www.kijiji.it/offerte-di-**lavoro**/**cameriere**/

Lavoro - **Cameriere** Di Sala, Offerte **lavoro** | Indeed.com
Trova **lavoro**: **Cameriere** Di Sala su Indeed.com. una ricerca. tutti i lavori. Cerca il
tuo **lavoro** ideale tra più di 300.000 offerte di **lavoro** pubblicate da portali **lavoro** ...
it.indeed.com/offerte-**lavoro**-**Cameriere**-Di-Sala

Offerte di **lavoro cameriere** con vitto e alloggio - Italia | careerjet.it
Trova sul motore di ricerca Careerjet tutte le offerte di **lavoro** per **cameriere** con
vitto e alloggio in Italia pubblicate su tutti i siti di annunci di **lavoro**.
www.careerjet.it/**lavoro**-**cameriere**-con-vitto-e-alloggio.html

Lavoro - **Cameriere** - Roma, Lazio, Offerte **lavoro** | Indeed.com
Trova **lavoro**: **Cameriere** - Roma, Lazio su Indeed.com. una ricerca. tutti i lavori.
Cerca il tuo **lavoro** ideale tra più di 300.000 offerte di **lavoro** pubblicate da portali
...
it.indeed.com/Roma,-Lazio-offerte-**lavoro**-**Cameriere**

Cameriere - Offerte di **lavoro** a Milano - Kijiji: Annunci di
eBay
1 giorno fa ... Sai che a Milano cercano 320 esperti lavoratori? Su Kijiji
trovi tanti posti di **lavoro** , anche subito, con ogni forma contrattuale.
Trovi anche ...
www.kijiji.it/offerte-di-**lavoro**/offerta/annunci-milano/**cameriere**/

Lavoro - **Camerieri**, Offerte **lavoro** | Indeed.com
Trova **lavoro**: **Camerieri** su Indeed.com. una ricerca. tutti i lavori. Cerca il tuo
lavoro ideale tra più di 300.000 offerte di **lavoro** pubblicate da portali **lavoro**,
giornali ...
it.indeed.com/offerte-**lavoro**-**Camerieri**

Offerta di **lavoro Cameriere** Annuncia di reclutamento in

17800 Greek results for **σερβιτόρος θέσεις εργασίας** - [Translated
cameriere lavoro from Italian to Greek] - Deactivate automatic
query translation

Μπάρμαν-**Σερβιτόροι**-DJ - Διάφορες Ειδικότητες -
Αγγελίες για **εργασία**
Αγγελίες για **εργασία** Μπάρμαν-**Σερβιτόροι**-D.J. - Διάφορες
Ειδικότητες - Αναζητούν εργαζόμενους. Βρέθηκαν 720 αποτελέσματα.
Ταξινόμηση κατά: προεπιλεγμένα ...
www.xe.gr/jobs/evresi,mparman-**servitoroi**-d.j.,34511.html

θέσεις εργασίας - **εργασία σερβιτορος** - Ελλάδα | careerjet.gr
Όλες οι **θέσεις εργασίας σερβιτορος** στην περιοχή Ελλάδα.
www.careerjet.gr/**θέσεις**-εργασια-**σερβιτορος**.html

εργασία: **Σερβιτόροι** | Indeed.com
Σερβιτόροι Διαθέσιμες δουλειές στο στο Indeed. ένα κλικ. όλες οι **θέσεις**
εργασίας.
gr.indeed.com/**Σερβιτόροι**-jobs

Σερβιτόρος/Μπάρμαν | proson.gr - Εύρεση **εργασίας**
-**Σερβιτόρος**/Μπάρμαν. -Τεχνολόγος Τροφίμων ... **Θέσεις εργασίας** για το
κατάστημα Mikel στον Κολωνό. Τελευταία ενημέρωση: ... Jooble. **Εργασία**, δουλεια
...
www.proson.gr/κατηγορία/**σερβιτόρος**

θέσεις εργασίας - **εργασία σερβιτοροι** - Ελλάδα | careerjet.gr
Όλες οι **θέσεις εργασίας σερβιτοροι** στην περιοχή Ελλάδα.
www.careerjet.gr/**θέσεις**-εργασια-**σερβιτοροι**.html

Σερβιτόροι - Jobs in Cyprus
Nippon Japanese Lounge Bar - **Σερβιτόροι** / Σερβιτόρες / Καθαρίστρια - Λεμεσός
... 29880, Αμερικάνικη αλυσίδα εστιατορίων SUBWAY - Νέες **Θέσεις Εργασίας**
www.ergodotisi.com/jobs/**servitoroi**

Front Office Manager και **σερβιτόροι** στην Tresor Hotels -
Εργασία ...
22 Οκτ. 2014 ... Προσωπικό για τη στελέχωση ξενοδοχείων της στο
Νότιο Αιγαίο αναζητά η εταιρεία Tresor Hotels, με τις "ανοικτές" **θέσεις**
να αφορούν έναν Front ...
www.**ergasia**.gr/front-office-manager-ke-servitori-stin-tresor-hotels/

PROJECT DESCRIPTION

Project description

- The Big Data of linguistic corpora (queries) in different EU languages will be tagged using semantic approach: combining words according to their meaning into families belonging to a domain and subdomain.

- The identification is made by using Natural Language (NL) understanding techniques capturing the meaning of phrases.

Project description

- The selected data would be tagged –by combining portions of unstructured data– with terms (in EN) according to their meaning into families belonging to the labour market domain and subdomains respectively.

- Those terms would then be semantically associated with equivalent terms in other EU languages through their common concept.

- The reference terms used for tagging data could be retrieved from different EU databases that are already available –making the most of the particular characteristic of reuse that lies under the concept of ontologies– such as **IATE, EUDAT, EuroVoc ontology**, etc.

Scope of the project

- With such a thematic search engine it would be easier for EU citizens to find job opportunities across Europe.

- One of the biggest problems in this sector is actually the difficult matching of labour demand and supply due to language barriers.

- It is a fact that some citizens from a certain member state are not aware of possible job opportunities in another member state.

Conclusion

- A multilingual thematic search engine could not only open up new worlds to qualified workers seeking for a challenge in another member state, but also open up new possibilities for employers who look for qualified workers across Europe but do not necessarily find them.

Conclusion

- In order to further promote and contribute to a barrier-free EU setting, the metasearch engine could enable EU citizens to seek online for all sorts of information that will help them to enrich their academic qualifications, improve their employability or for EU companies to extent their visibility.

ROLE OF TERMINOLOGY

Role of terminology in this project

- The role of terminology in this project: d**isambiguation of search results and query consistency**.

- An **autosuggest** feature could help to improve the **input by the user and refine the search results**.

- Terms used for tagging the unstructured data could be also reused for improving consistency in CVs as well as for improving the use of **keywords** to boost **CV indexing**.

- The same would account for **job descriptions** by recruiting companies.

Terminology is key

- The key element in this project is terminology, as **data cannot be properly explored without terminology resources** and therefore multilingual **terminological resources are the only way to disambiguate big data sets**