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Multilingual discovery in Europeana

Sjoerd Siebinga, Europeana Office

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About this presentation

Comparative linguistics

- Training your system requires high-quality annotated corpora
- Dialectal and cultural differences are found on every level
- European Bureau for Lesser Used Languages (EBLUL)

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5 levels of multilingual support

- Multilingual interface
- Multilingual search on a monolingual baseline
- Multilingual browsing of vocabularies
- Multilingual query translation
- Multilingual result translation

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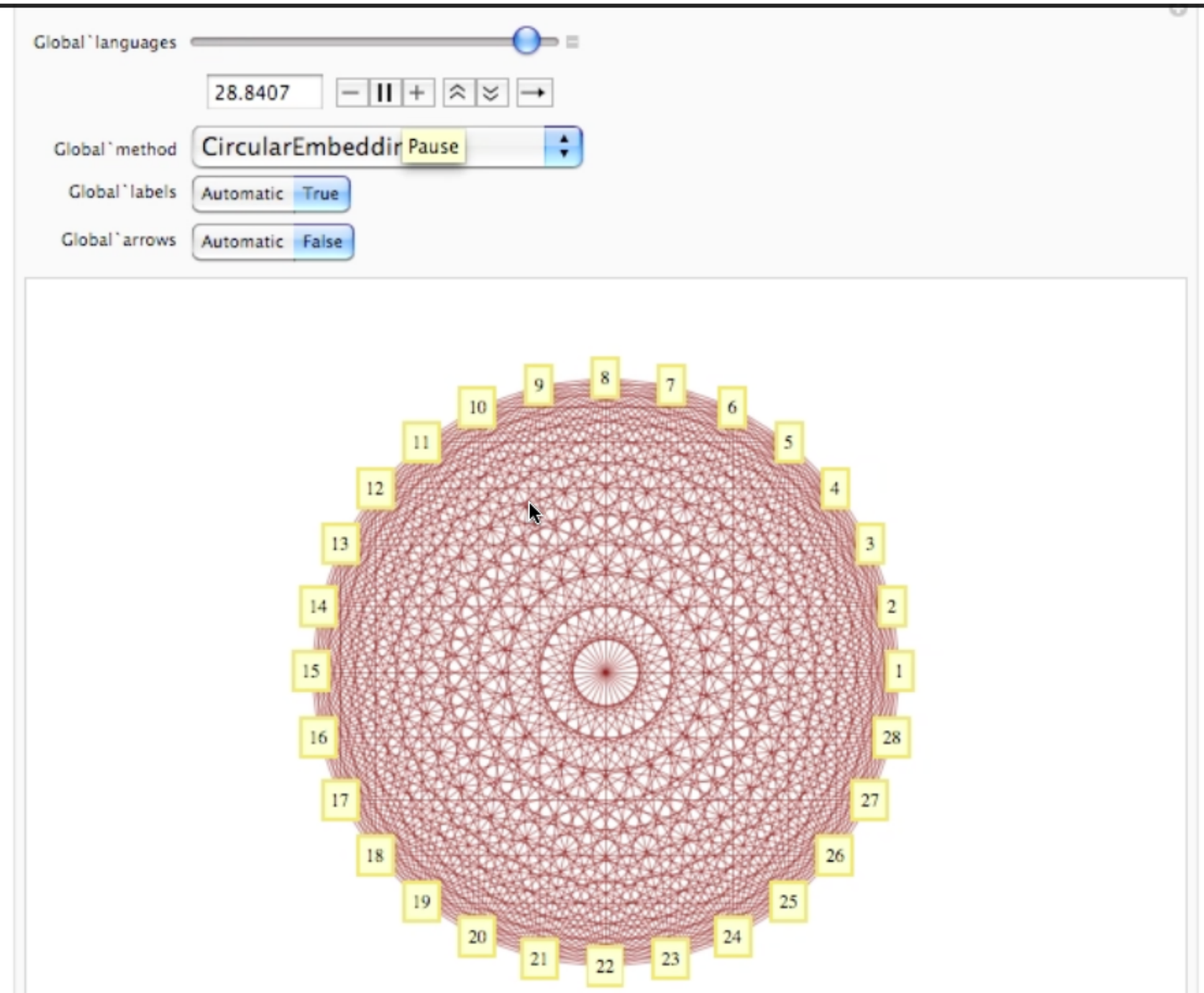
Is multilingual support still important?

- Know your users.
- Most web users are mainly monolingual
- Every website offers a service

Scope, Expectations, and Granularity



What can we learn from Europeana

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What is a sustainable internet business model

- Do not drink from the same source as your primary customers
- Every web-page view costs money, so a conversion to income of a percentage is key to survival and scalability
- Can you afford to succeed.
- What does it cost to extend coverage for:
  - functionality
  - languages

Metadata is really challenging to work with

What are the basics you need

- bilingual dictionaries
- stemmers
- syntactic parsers
- Named Entity Recognition software
- stop-word list
- language and boundaries detection
- ? annotated lemmata for the most frequent words

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How would you ideally go about your work

- identify the language and/or boundaries
- apply stemmers and syntax parsers
- do Named Entity recognition
- determine dictionary coverage of unique types
- semantic reification
- etc.

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What data does Europeana get?

Implications for search engine

- one single index
- no stop-word lists
- no stemming
- no language specific processing pipelines

How should you maintain it

- Have quarterly quality checks with user groups
- Hire experts to update and maintain your bilingual dictionaries
- Quality Assurance is an inherently iterative process

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The final frontier: Time, and spelling changes

- Spelling and language evolution exponentially increase the complexity of resources to maintain.
- Which languages are you going to support
- Europeana wants to offer Transcendent Discovery through space and time.
  - Graceful discovery and recovery.
    - Names, words, places, boundaries, countries, etc. Every thing changes over time. We want to make this available through an intuitive interface.
    - Event based browsing is key

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Closing remarks

- MLIA is not difficult, just very expensive
- Not development cost, but maintenance cost are the real bottleneck
- Mlia is all about resources and a little about technology
- Be extremely explicit in what you are going to offer and be certain that the User really wants it, i.e. user-needs should drive business requirements
- User Interface and Interaction design is more important then the number of features you offer

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