



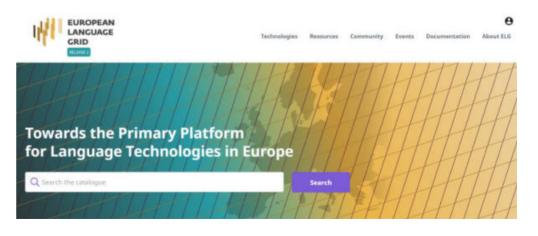
European Language Equality: Preliminary Results LRT Collection and Language Reports

Maria Giagkou (ILSP, R.C. "Athena")

15/16/17-11-2021 META-FORUM 2021 – Using the European Language Grid (virtual conference) http://www.european-language-grid.eu

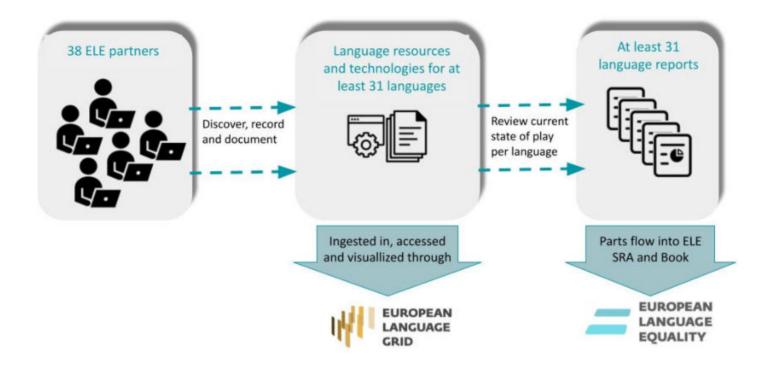
Assessing the current support of Europe's languages through Language Resources and Technologies (LRTs)

- Methodology:
 - Discover LRTs for each language
 - Document LRTs
 - Populate and update the European Language Grid platform
 - Compile a report per language, based on evidence collected
- Outputs:
 - META-NET White Papers series update
 - Aggregated data searchable and visualized through the ELG interface



Compiling a collection of LRTs representative of the current state of digital equality of European languages





List of all languages investigated by ELE and partners involved: https://european-language-equality.eu/languages/

What is in scope



• Corpora:

- textual, audio, video, images, multimodal
- monolingual, bi-/multilingual, parallel, comparable
- raw or annotated

• Lexical/conceptual resources:

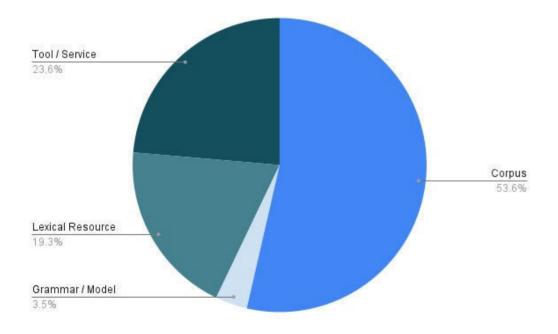
 computational lexica, terminological databases, ontologies, thesauri, wordnets, gazetteers, term lists, etc.

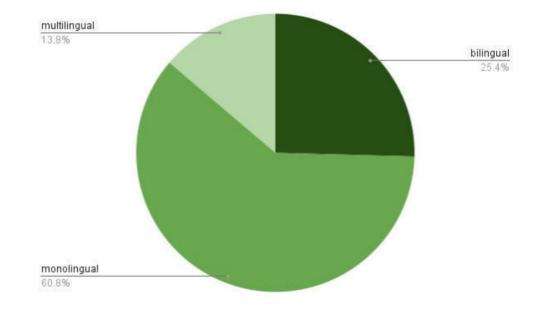
- Language models & computational grammars:
 - ML models
 - n-grams
 - computational grammars
- Tools/services
 - All the basic NLP tools for a language, from tokenization to syntactic parsing
 - Text and speech analytics/mining
 - Machine Translation
 - NLU / NLG
 - Conversational systems

First results: overview



- 6.000+ new LRTs contributed by ELE partners (to appear in ELG)
- **11.000+** LRTs in the consolidated ELE & ELG collection

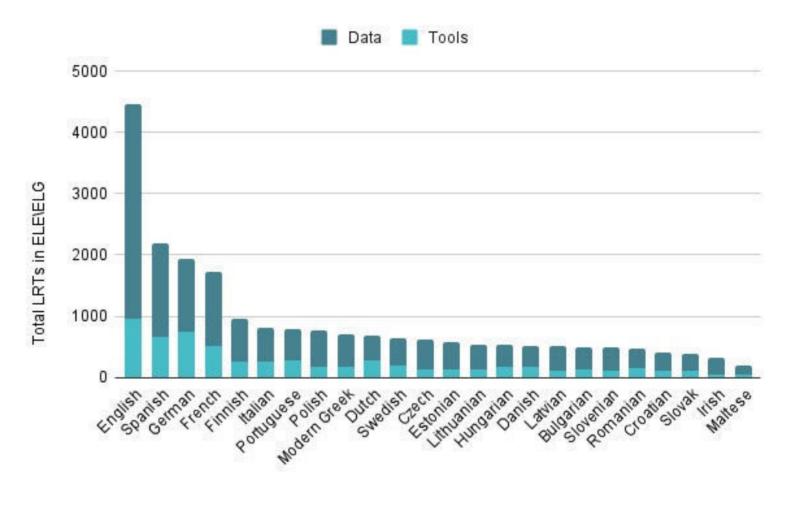




First results: EU-24 official languages

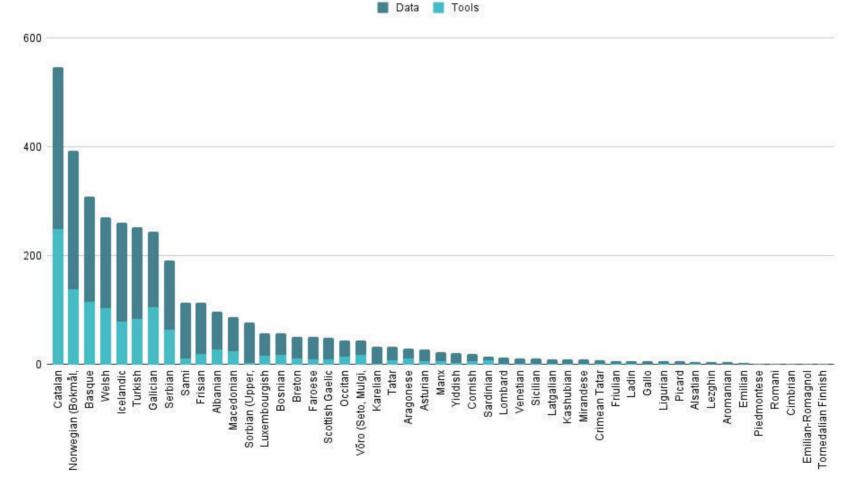


Languages	% of LRTs represented in / supported by
English	40%
Spanish	20%
German	17%
French	15%
Finnish Italian Portuguese Polish Greek Dutch Swedish Czech Estonian Lithuanian Hungarian Danish	5% to 10%
Latvian Bulgarian Slovenian Romanian Croatian Slovak Irish Maltese	<5%



First results: non-EU-24 languages

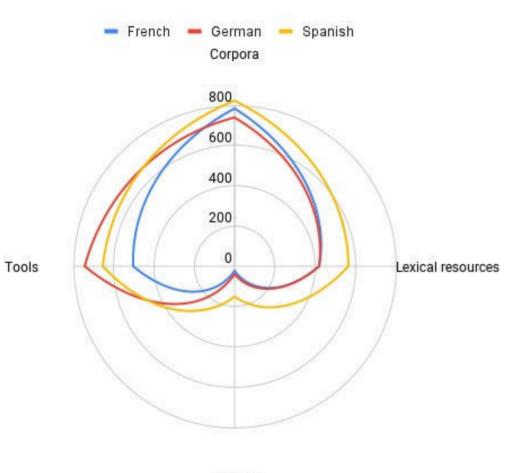




No LRTs identified for Arberesh, Carpathian-German, Carpato-Rusyn, Franco Provencal, Griko, Indigenous Languages in Guyane, Jerriais, Meskhetian, Mocheno, Plattdeutsch, Réunion Creole, Southern Italian, Walser

First results: comparing languages based on #LRTs





Models

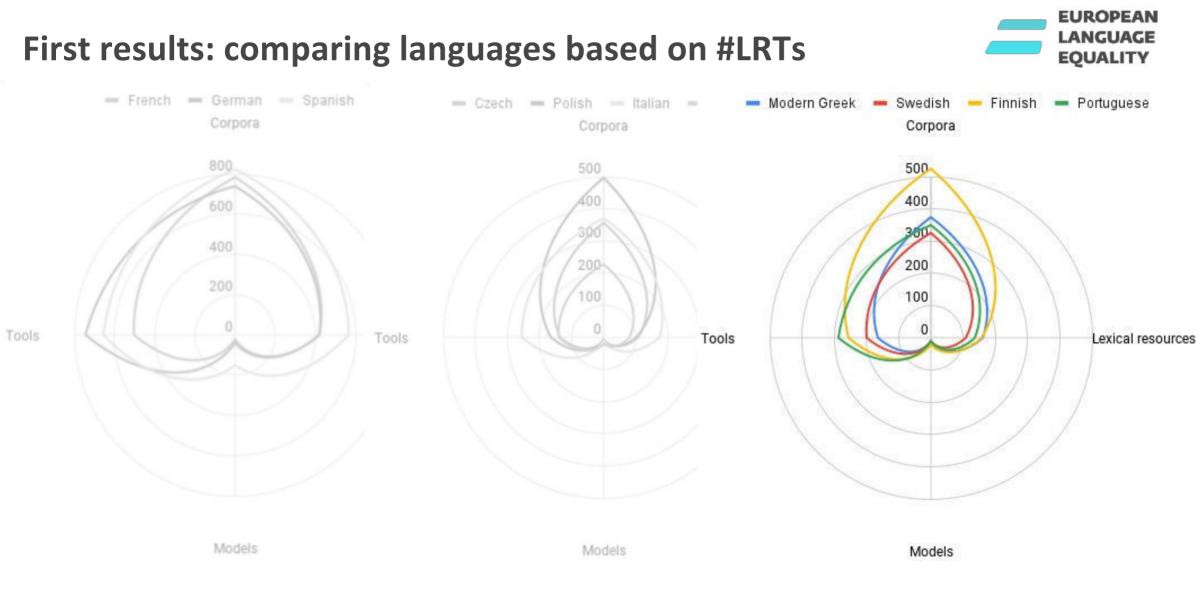
- French - German - Spanish - Czech - Polish - Italian - Romanian Corpora Corpora 800. 500 400 600 300 200 100 Tools Tools Lexical resources

First results: comparing languages based on #LRTs



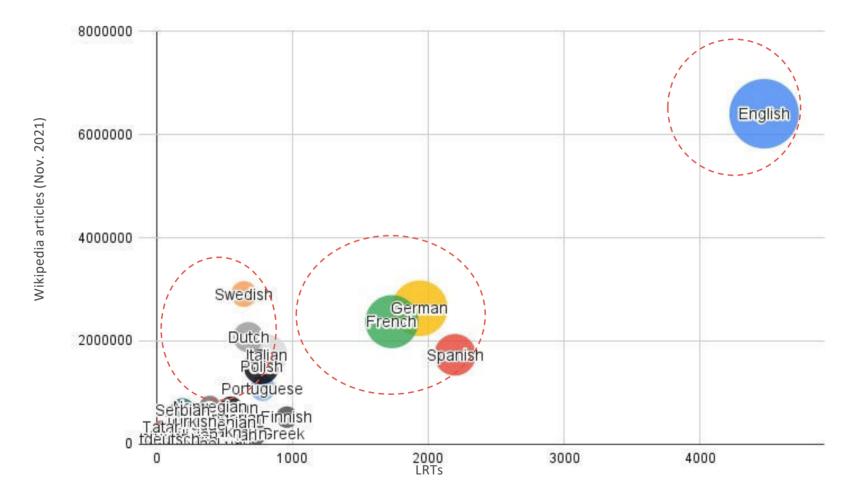
Models





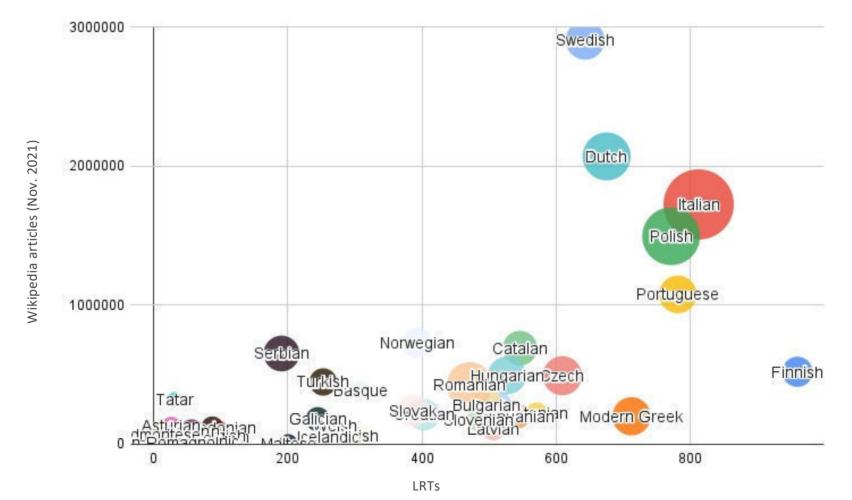
First results: introducing a contextual factor: presence on the internet (1/2)





First results: introducing a contextual factor: presence on the internet (2/2)





Language Reports



- Tradition of META-NET White Paper Series
- Quantitative and qualitative evaluations of the level of support each language receives through technology:
 - brief introduction to the LT field
 - general facts about the language
 - availability of LRTs based on the combined collection of ELG and ELE resources
 - support it receives through dedicated funding programs and projects
 - participation in research infrastructures

• ...

• Stand-alone digital publications; parts will be included in the final ELE agenda and book.



Thank you!



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