LEX2 infrastructure

- virtual access (= online only)
- single-sign-on (SSO) using eduGAIN network
- freely available for non-commercial usage across EU countries
- as of February 2019:
  - Sketch Engine
  - Lexonomy
Sketch Engine

- corpus query system (CQS)
- platform for providing and sharing corpora
- platform for building corpora
Sketch Engine: corpus search

- concordance
- wordlist of words/ngrams
- word sketch
- sketch diff
- distributional thesaurus
- terminology extraction
- trends detection

...and much more
Sketch Engine: building corpora from web

- web crawling – Spiderling
- (partial) text deduplication – Onion
- boilerplate removal – Justext
- character encoding detection – Chared
- character normalization – Uninorm
- tokenization – Unitok
Sketch Engine: language pipelines

- PoS tagging: 36 languages
- lemmatization: 32 languages
- word sketch grammar: 30 languages
- term grammar: 19 languages
Sketch Engine: corpora

- corpora for 100+ languages
- 85 lgs over 10M
- 54 lgs over 100M
- 31 lgs over 1G
- 12 lgs over 10G
- 63 lgs with a tagged corpus
- 55 lgs with a lemmatised corpus
Sketch Engine: corpora

- web corpora
- monitor corpora
- learner corpora
- parallel corpora
- spoken corpora
- ...
Lexonomy

• simple web-based dictionary writing system
• interconnected with Sketch Engine (push & pull)
• designed for post-editing
• more to follow by Iztok Kosem and Michal Měchura
Status of the LEX2 infrastructure

As of February 2019:
• 265 institutions joined the infrastructure from 23 EU countries
• over 10,000 users
• over 150,000 user-hours
This project has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement No 731015.
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Current and future development

Expanding the infrastructure (WP8)
- further tools and services
- e.g. Skema: pattern editor following a CPA approach (Hanks et al.)

Research and development (WP4)
- NLP for lexicography
- dictionary drafting and post-editing

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Dictionary drafting

- One-Click Dictionary function in Sketch Engine
- a dictionary draft automatically pushed to Lexonomy
  - headwords: wordlist
  - word senses: clustering through word sketches
  - collocations: word sketches
  - examples: GDEX
  - definitions: GDEF
  - labels: word sketch highlights
  - translations: bidicts from parallel corpora
Dictionary post-editing

- development of tools that support efficient post-editing
- development of methodology that accounts for post-editing
- teaching and training
- all included into Lexonomy
Conclusions

- LEX2 infrastructure ready and growing fast
- more tools and better tools to be included soon
- any questions ⇒ talk to us at the booth!