Lexicographic Practices in Europe: Results of the ELEXIS Survey on User Needs

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Aim

To get a good overview of

- lexicographic practices both for born-digital and retrodigitised resources
- different tools and methods used by lexicographers
- the needs that lexicographers have now or anticipate to have in the short-term and long-term future

- carried out in the context Horizon 2020 project European Lexicographic Infrastructure (ELEXIS)
- focus on Europe, but also disseminated outside Europe

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Methodology

- online questionnaire (Google Forms)
- 13 July 2018 - 1 October 2018
- dissemination: mailing lists, social networks, conferences
- 44 questions
- 6 sections: (1) General information; (2) Ongoing work; (3) Software and tools; (4) Publication; (5) Retrodigitisation; (6) Past and future
- many open-ended questions
- ELEXIS Delivirable 1.1.

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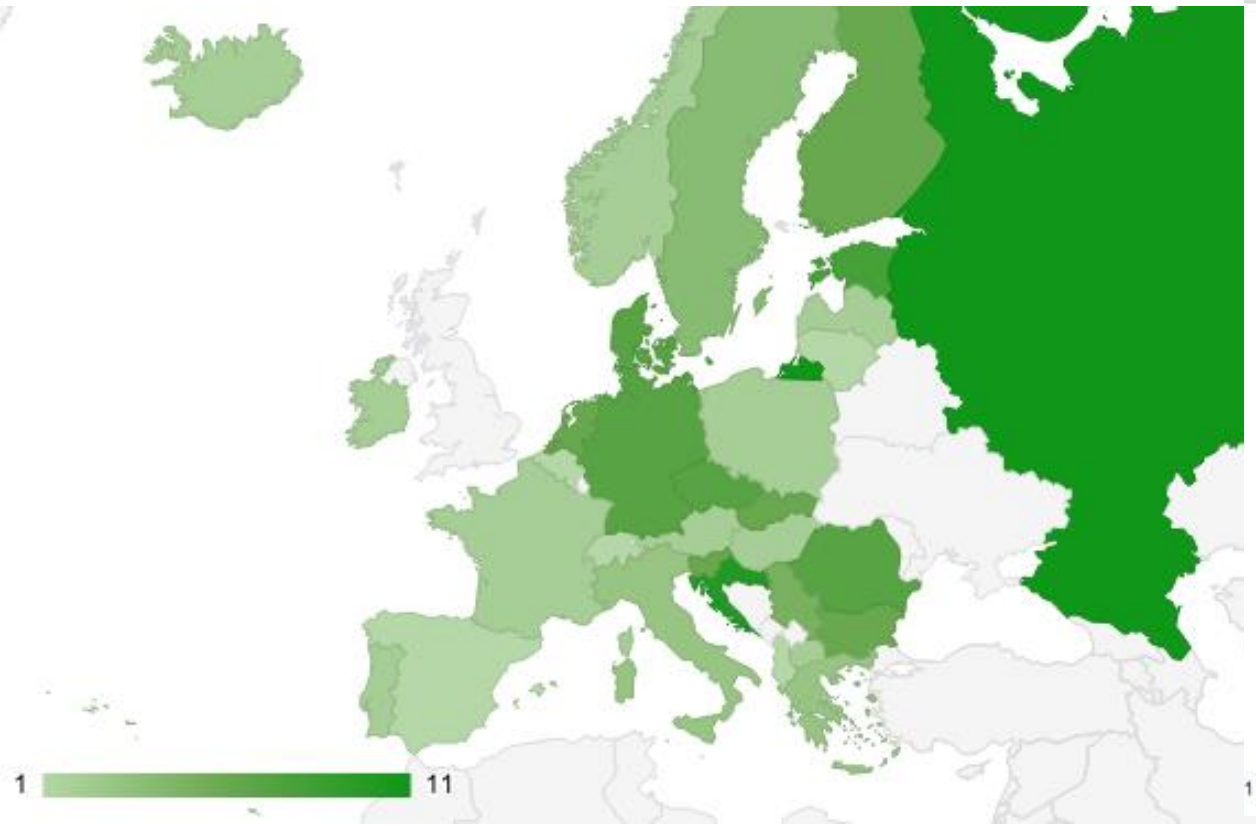
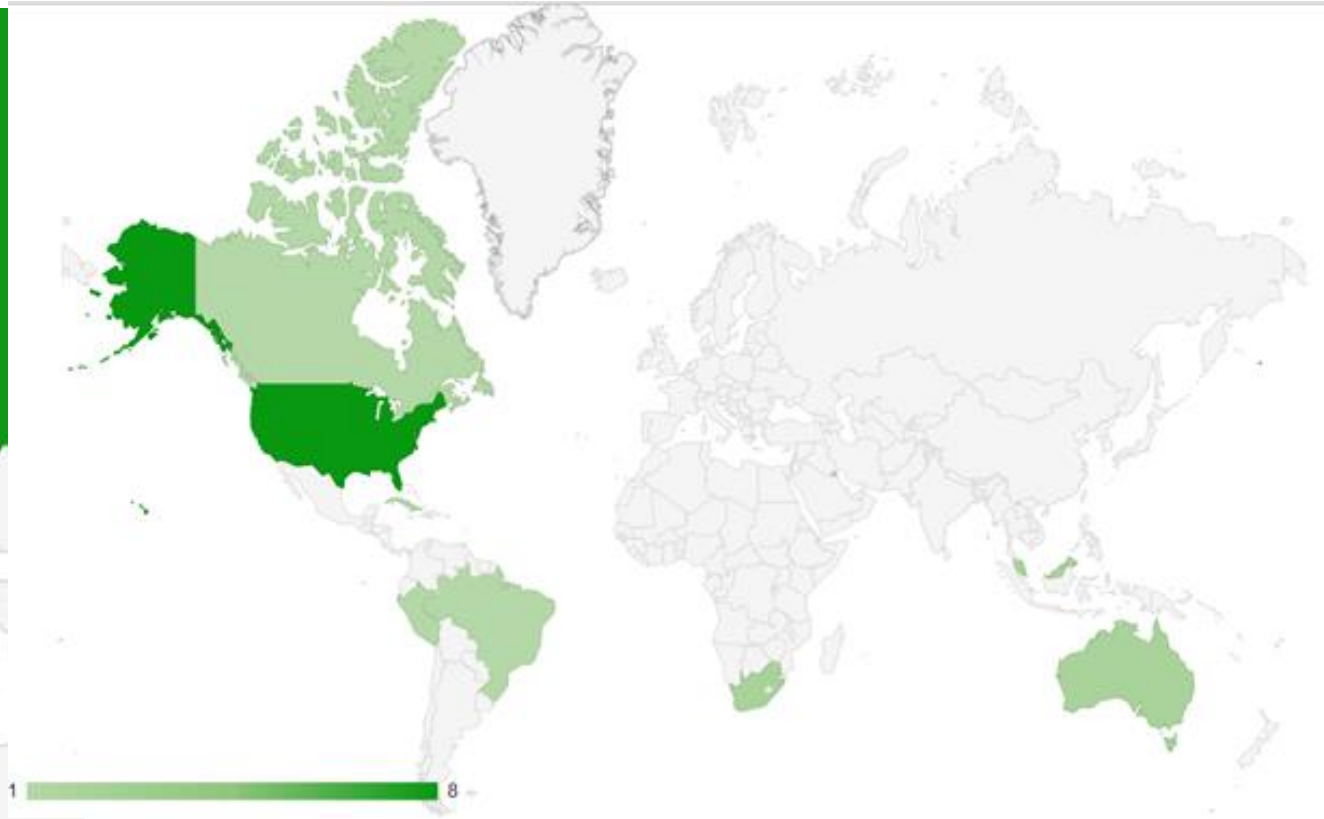
Participation

159 respondents

45 countries (36 European and 9 outside Europe)





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Methodological concerns

- survey design and formulation of questions affect the answers
- interpretation of terms may differ per person
  (e.g. *born-digital*, *IT-support*, *outsourcing*)
- incomplete participation lowers validity and creates a bias

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Background surveys (2013-2017)

ISCH COST Action IS1305 European Network of e-Lexicography (ENeL) (2013-2017)

- 300 lexicographers
- 30 countries
- survey on the workflow of corpus-based lexicography (2014)
- survey on Dictionary Writing Systems and Corpus Query Systems (2014/2015)
- survey on automatic knowledge acquisition for lexicography (2015)

Horizon 2020 project European Lexicographic Infrastructure (ELEXIS) (2018-2022)

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General background of respondent

- works at public institution on monolingual dictionary, which will be published online
- has a PhD and works for more than 20 years in lexicography
- has been trained within his/her own institution
- works in a team of 3-6 people that consists only of people from his/her institution

eLex 2017 group photo

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Software and tools (N=89)

55.7% use both, Dictionary Writing System (DWS) and Corpus Query System (CQS)

- 15 DWS
  - commercial, e.g. IDM, Tlex, iLex, Multiterm
  - open-source, e.g. Lexonomy, FLEx (Fieldworks Language Explorer)
  - in-house, e.g. INT-DWS (Holland), DGD (Germany), Ekilex (Estonia)
- 22 CQS
  - commercial, e.g. **Sketch Engine (54.8%)**, Tlex
  - open-source, e.g. Corpus Workbench (CWB), Korp, NoSketchEngine, AntConc, COSMAS II
  - in-house, e.g. CoRest (Denmark)
- Common model: in-house DWS + commercial CQS, one DWS and one CQS

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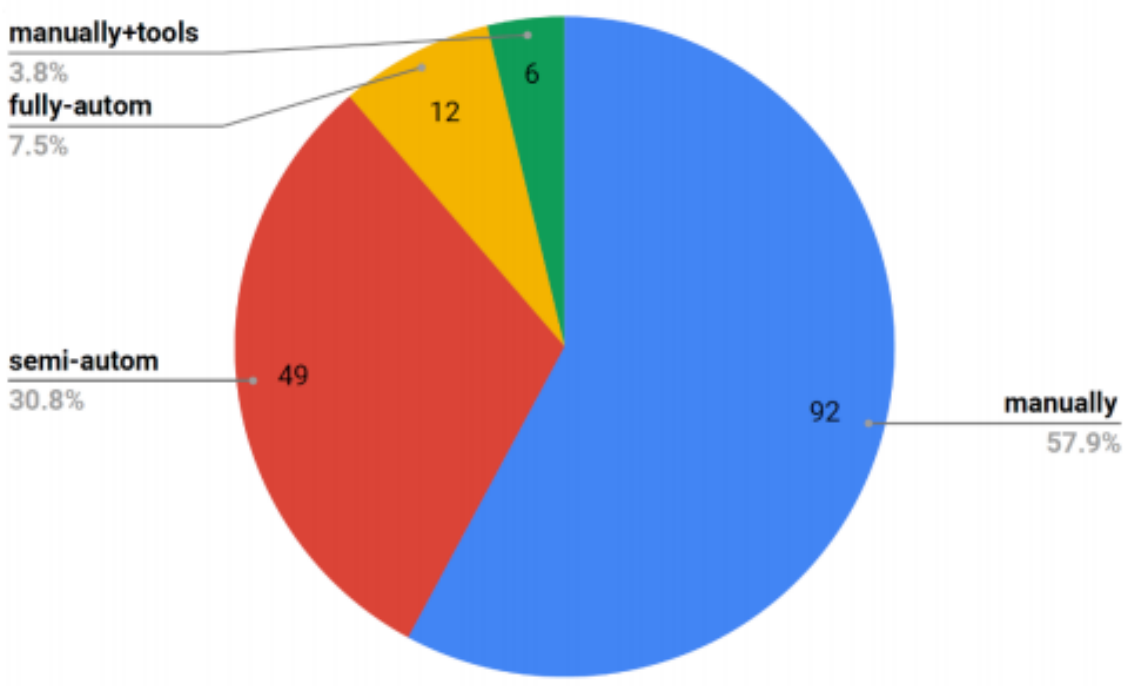
Compiling methods (N=159)



Compiling methods for all projects (N=159)

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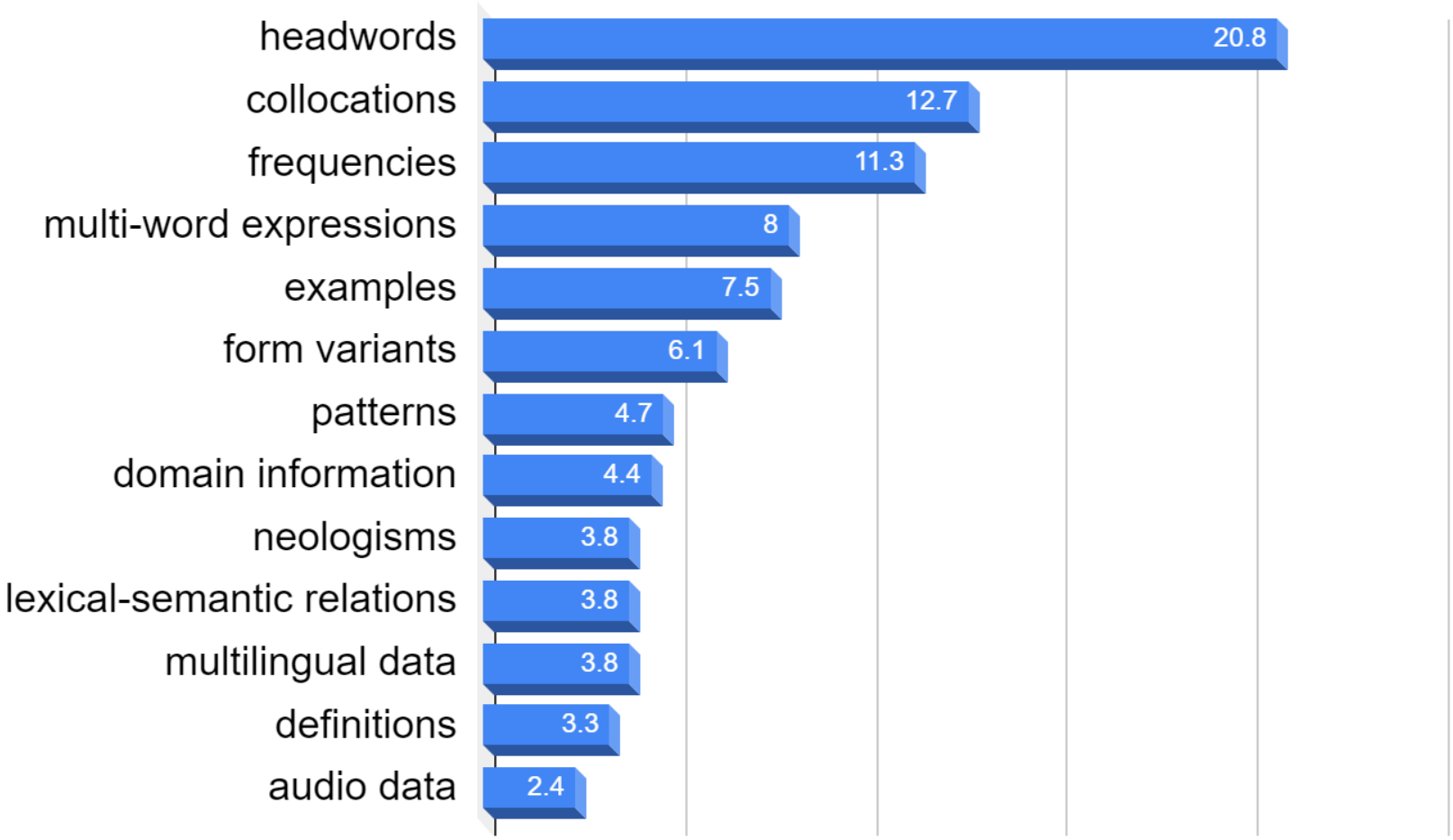
Automatic data extraction (N=150)



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The changing job of the lexicographer

- not just editing dictionary entries
- online publication, user research and user involvement
  - analysis of user logs and user feedback
  - analysis of data from Google Analytics
  - creating add-on materials (blogs, word games)
  - promotional activities
  - project management

  - crowdsourcing
  - gamification

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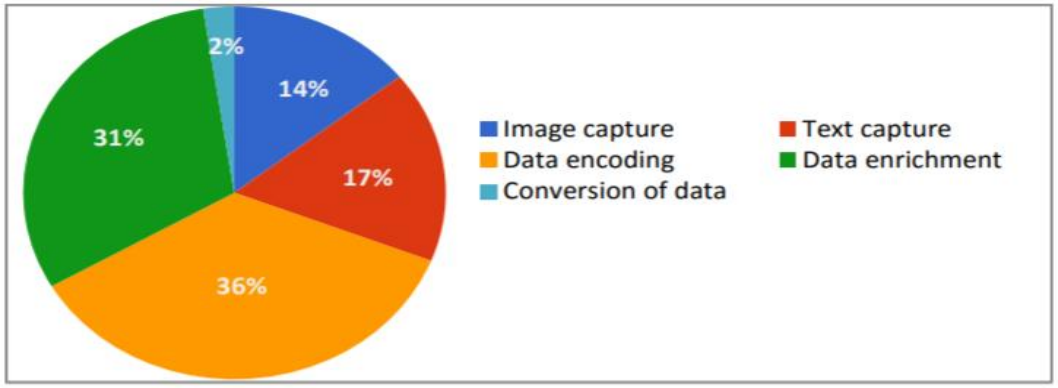
The changing job of the lexicographer

- evaluating the user interface
- communication with IT specialists, incl. UX/IX designers
  - IT tasks are the only tasks that are outsourced (from designing the online interface to offering support in the use of DWS and CQS)
  - problems: the cost and lack of regular funding
- retrodigitisation (10% of respondents)
  - data encoding
  - data enrichment



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Wishes and Needs: software

- online, fast, open-source, browser independent, intuitive, easy to maintain, real-time saving
- **interoperability** with other resources, operating systems and tools (possibility for automatic pre-compilation of entries)
- **integration of CQS and DWS**
- better tools for extraction and automatic processing of data from corpora
- dictionary drafting
- **customisability** (in terms of functionalities and interface)

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Wishes and Needs: software

- API access, proper documentation (not a black-box system)
- support for collaborative work
- online publishing of the results
- ideally free

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Wishes and Needs: recent trends

- sense clustering
- syntactic and semantic annotation
- detection of neologisms
- automatic acquisition of translation equivalents and lexical-semantic relations
- diachronic analysis
- (cross-linguistic) interlinking

- data visualisation

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Wishes and Needs: recent trends

- tools for harmonization of dictionary formats
- common **standard** for the development of lexicographic resources

- tools for crowdsourcing and gamification

- different presentation modes, including mobile applications

- combining a synchronic and a diachronic approach in one resource
- common infrastructure and better tools for retrodigitising

- central repository

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Wishes and Needs: training

- degree programmes (e.g. EMLex, European Master in lexicography)
- training materials, more case studies
- **interdisciplinarity**

NB! Lexicographic community is very heterogeneous

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How will ELEXIS help?

- training and education (e.g. DARIAH-Campus platform, grants for research visits)

- best practices and standardisation
  - Elexis deliverables:
    - Deliverable 3.1: Lexical-semantic analytics for NLP: sense clustering
    - Deliverable 6.1: Early ELEXIS interoperability report

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elexis european lexicographic infrastructure

How will ELEXIS help?

- tools
  - Sketch Engine, Lexonomy, Elexifier, Naisc ...
  - crowdsourcing and gamification tools
- automatic knowledge extraction (Oneclick Dictionary)
- services
  - Elexifinder, News feed

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