Language Resources to Support Language Diversity – the ELRA Achievements

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Overview

- LR Identification & Distribution
- Production projects
- Infrastructure projects
- Events and dissemination
- Future activities

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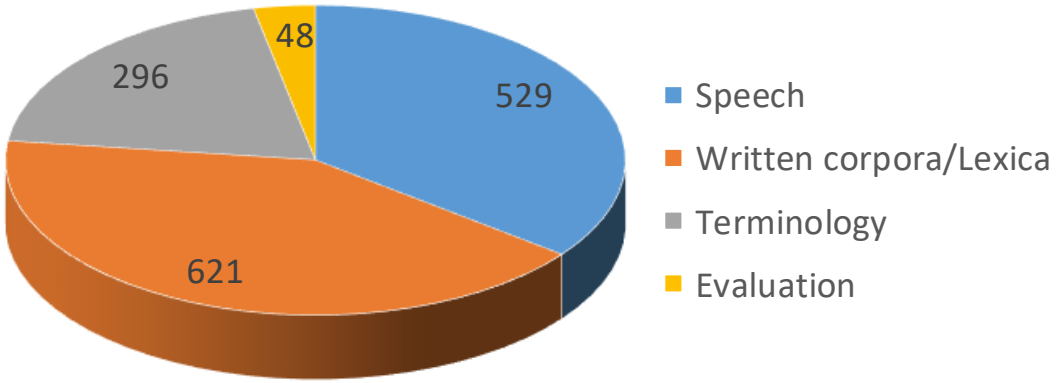
ELRA Catalogue – http://catalogue.elra.info

>1400 LRs



- Large series of datasets thanks to international partnerships, eg. between 2019-2022
  - 50 monolingual / multilingual lexicons from the CJK Dictionary Institute, Inc, specialized in Arabic, Chinese, Japanese and Korean lexicography
  - 115 speech resources for various European and Asian languages from SpeechOcean
  - 32 text corpora and bilingual/trilingual dictionaries for Vietnamese provided by the Kimtudien Multilingual Data Center

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ELRA Catalogue – http://catalogue.elra.info

- Examples of LRs for low-resourced languages:

  - Ema-lon **Manipuri** Corpus
  - Tham **Khasi** annotated corpus
  - Arbobanko (**Esperanto** Treebank)
  - **Amharic-English** bilingual corpus
  - FAME! Speech Corpus (**Frisian**)
  - Helsinki Corpus of **Swahili**
  - **Mongolian** written corpus
  - PAROLE **Irish** Distributable Corpus
  - **Pashto** monolingual and parallel corpora
  - **Persian** Speech Corpus
  - Speaking atlas of the **regional languages of France**
  - The EMILLE/CIIL Corpus (14 **South Asian languages**)
  - **Welsh** SpeechDat(II) FDB-2000

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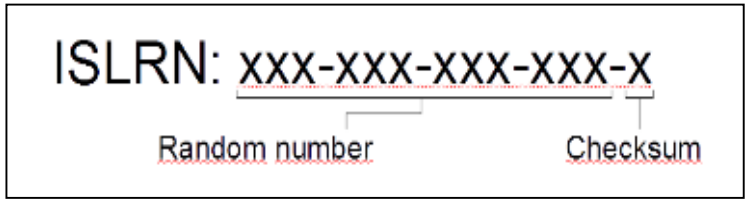
ISLRN – International Standard LR Number

http://www.islrn.org

- ISLRN persistent identifier
- Latest figures:
  - 3223 LRs assigned since January 2014 (31/03/2022)
  - ~250 distinct languages
  - Ongoing contributions, in particular from LREC2022
- New version of ISLRN web portal (February 2022):
  - ported into latest versions of Django and Python frameworks
  - refreshed design and functionalities, including search tool & enhanced submission pages



ISLRN identifier structure

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Share your LRs

- Community initiative "Share your LRs" since LREC 2014
  - Various types of LRs: corpora, grammar/language models, ontologies, terminology LRs, treebanks, evaluation data/packages
  - Clean version of lists of LRs:
    - 181 LRs available in LREC 2020 list @ https://bit.ly/3o836kM
    - 125 LRs available LREC 2018 list @ https://bit.ly/3dpWdq3
    - 82 LRs available LREC 2016 list @ http://ow.ly/KTzf30fXoCe
    - 116 LRs available LREC 2014 list @ http://ow.ly/9gDm30fVMiu
- Share your LRs at LREC 2022!

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Other LR dissemination channels

- OLAC (Open Language Archives Community) archive
  http://www.language-archives.org/archive/catalogue.elra.info
  - Catalogue metadata export in XML, updated in 2020

- Google Dataset Search
  https://datasetsearch.research.google.com/
  - ELRA Catalogue update with JSON code (schema.org)

- ELG Language Technology platform
  https://www.european-language-grid.eu/
  - Catalogue metadata export in Metashare/ELG format

- OpenSLR Mirror hosted by ELRA/ELDA
  https://openslr.elda.org

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Corpora for Speech technologies

- **MGB-5 Moroccan and MGB-3 Tunisian Dialect databases**
  Produced for MGB-3 and MGB-5 Challenges (Multi-Genre Broadcast) - http://www.mgb-challenge.org/
  14 hours collected and transcribed for Moroccan and Tunisian dialects

- **French transcription corpus**
  Development of an automatic subtitling system primarily for deaf people - Rosetta Project https://rosettaccess.fr/
  Transcription of 20 hours of TV shows, broadcasts, documentaries, and series

- **Tamasheq Corpus for Automatic Translation**
  Building an automatic translation system for African vernacular languages
  Translation of a Niger's broadcast news from Tamasheq into French

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Corpora for Speech technologies

- **Audio Data Annotation for Speaker Identification (French)**

  European research program Chist-ERA - https://www.chistera.eu/

  Annotating audio data based on video files to identify 5901 unique speakers.

  328 hours from French channel LCP

- **Other projects (private demand):**
  - Multilingual conversational telephone speech corpus

  Arabic, English, French, German, Italian, Korean, Mandarin and Cantonese Chinese, Portuguese, Russian
  - Speaker Identification Corpus for French

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Corpora for Written technologies

- **Rephrasing a Q&A corpus to improve a conversational system**
  Natural questions in English to improve a conversation system
  Rephrasing questions from American corpus CoQA (Conversational Question Answering)
- **Annotated tweet corpus in Arabizi, French and English**
  INSA Rouen Normandie / SAPhIRS project (System for the Analysis of Information Propagation in Social Networks)
  17103 tweet sequences annotated on 3 themes: Hooliganism, Racism, Terrorism
- **Other projects (private demand):**
  - Short messages (SMS) corpus (Arabizi, Moroccan & Tunisian)
  - Corpus of crawled documents
  - English-Arabic Parallel Corpora

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Sharing project results

- Objective: capitalization on produced LRs

- Means: making LRs available through the ELRA Catalogue

- Example:

Annotated tweet corpus in Arabizi, French and English:
http://catalog.elra.info/en-us/repository/browse/ELRA-W0323/

Other LRs from production project to be released soon…

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ELRC (European Language Resources Coordination)

European Language Resource Coordination
Connecting Europe Facility

http://lr-coordination.eu/
Series of EU SMART contracts since 2015

- Target: support eTranslation with data from public sector across 30 European countries
- Objectives:
  - Improve availability and simplify access to LRs for MT
  - Establish LR observatory across EU Member States and associated countries, including Technology and Public Services National Anchor Points (>50 NAPs)
  - Raise awareness among stakeholders about the value and use of data for MT
  - Clarify legal and commercial issues
- Actions:
  - ELRC and eTranslation Technical and Legal Helpdesk
  - ELRC-SHARE Repository - https://elrc-share.eu/: many resources available to the community under open licenses
  - ELRC Conferences and Country Workshops
  - Surveys on Country Profiles and LT Market

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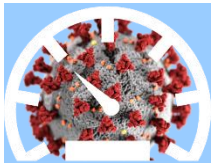
COVID MLIA (MultiLingual Information Access)



http://eval.covid19-mlia.eu/
Community Evaluation effort

- Target: improve/accelerate access to multilingual information, including but not limited to health-related content, in the context of the pandemic
- Objectives:
  - Aggregate and summarize different sources of information
  - Organize three rounds of evaluation
- Actions:
  - Data acquisition
  - Evaluation tasks:
    - information extraction
    - multilingual semantic search
    - MT task

=> Resources available on git repositories

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MAPA (Multilingual Anonymisation for Public Administrations)

https://mapa-project.eu/

EC-funded action under Connecting Europe Facility (CEF)

- Target: develop a toolkit for effective and reliable de-identification of texts in the medical and legal domains
- Objectives:
  - Definition of sensitive information to be de-identified
  - Design of annotation guidelines
  - Data collection and annotation in the EU 24 languages
  - Development and evaluation of NER-based de-identification toolkit
- Actions:
  - Data produced available through the ELRA Catalogue (+ ELG & ELRC-Share)
  - Deployable, dock-ready, open-source system
  - ELRA in-house deployment of the MAPA toolkit and anonymisation services offered to the public
  - Use case by the EC: Anonymisation service: https://language-tools.ec.europa.eu/NLPServices/NLP

LT4All – Language Technologies for All

https://en.unesco.org/LT4All

Enabling Linguistic Diversity & Multilingualism Worldwide

December 5-6, 2019
UNESCO Headquarters
Paris, France

- Organized as part of the International Year of Indigenous Languages 2019 (United Nations)
- December 4-6, 2019, in UNESCO Headquarters in Paris (France)
- Co-organized by several partners including ELRA and SIGUL, under the patronage of UNESCO
- 400 invited participants from 65 countries, all continents represented.
- 100 papers and 105 posters in the Collection of Research Papers of the 1st International Conference on Language Technologies for All https://lt4all.elra.info/proceedings/lt4all2019/

- ELRA involved in the International Decade of Indigenous Languages (2022-2032) with LT4All follow-up (2023)

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LREC - Language Resources & Evaluation Conference

- LREC 2020 cancelled due to the pandemic but proceedings online: http://www.lrec-conf.org/proceedings/lrec2020/index.html
- LREC 2022 in Marseille, 20-25 June 2022

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LRE Journal and other communication support

- **Regular promotion and dissemination activities:**

  - **Language Resources and Evaluation Journal** (Springer):
    https://link.springer.com/journal/10579/volumes-and-issues
    Co-edited by Nancy Ide and Nicoletta Calzolari
    Published by Springer
    Supported by ELRA
    Advisory Board: B. Maegaard, K. Choukri, J. Mariani, J. Odijk, C. Cieri, J. Tsujii

    ELRA member benefit: Online access for free to ELRA institutional members

  - **ELRA Newsletter (New! e-version since February 2022), Members' News, Various websites, Mailing lists**...

  - **ELRA Portal** www.elra.info

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What's next?

- Core mission continuation
  - Support **LR sharing** and **re-purposing** of researchers' resources (based on FAIR principles, DMP)
  - Support the **production of new LRs**
  - Support **evaluation campaigns/challenges**
  - Contribute to long-term **European/International initiatives**

- Roadmap
  - **Bridging gaps** by identifying missing LRs ("LR kits")
  - Tackling **multi-harvesting** practice
  - **Less-resourced languages**: SIGUL, next LT4All conference
  - **New AI paradigm**

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Thank you for your attention

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