

Description and documentation

- grammatical descriptions should be based on naturalistic data (corpora)
- language description based on language documentation (Himmelmann 1998; McDonnell et al. 2018)
- usual scenario:
 - .wav and ELAN files in archive (imported FLEx annotations?)
 - description written in word processor → PDF/book
- separate (but digital!) products

A new approach

- text is written in markdown
- data is stored in a database
- different output formats can represent entities differently

grammars
are **prose**
interspersed
with **data**¹

Why would one do this?

- database (analytical) updates are directly reflected in final output
- non-linear and data-rich output formats (backwards compatibility with paper)
- increased “reproducibility” of grammatical descriptions
 - writers are forced to explicitly reference database entries
 - skeptical readers can search the underlying corpus
- data is easily reusable by other researchers (no copy-pasting data out of a PDF)

Implementation

- text is written in markdown (what else?)
- choice of database: CLDF (Forkel et al. 2017) and CLLD (Forkel et al. 2019)

Prose

- the text module of the `cldfviz` library² allows embedding CLDF database entries in markdown output
- `pylingdocs` (Matter 2023b): a general-purpose application for data-rich linguistic documents
 - different output formats (LaTeX, HTML, CLLD)
 - cross-references and example references
 - tables
 - multi-file documents
- database pointers: `[f]` (form-1), or more complex: `[ex]` (`ex-04,ex-15?example_id=plur&title=Different functions of the pluractional suffix&with_primaryText=True`)

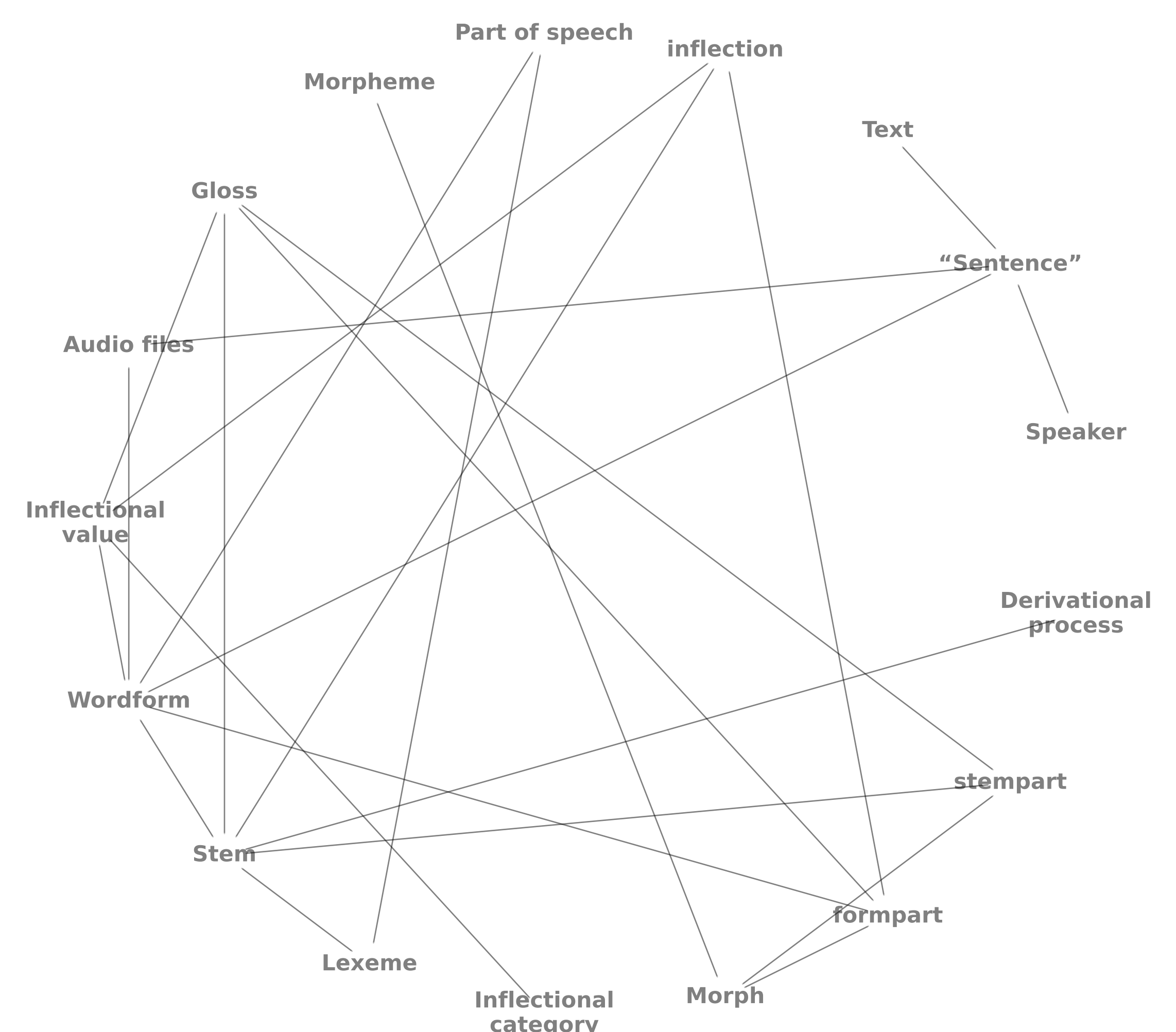
Data

- CLDF components for linguistic corpora (Matter 2023a)
 - available as a python library
 - integrated into `*box` and FLEx conversion libraries (Matter 2022a, 2023c)
 - lightweight, shareable datasets
- corresponding CLLD database models available as plugins

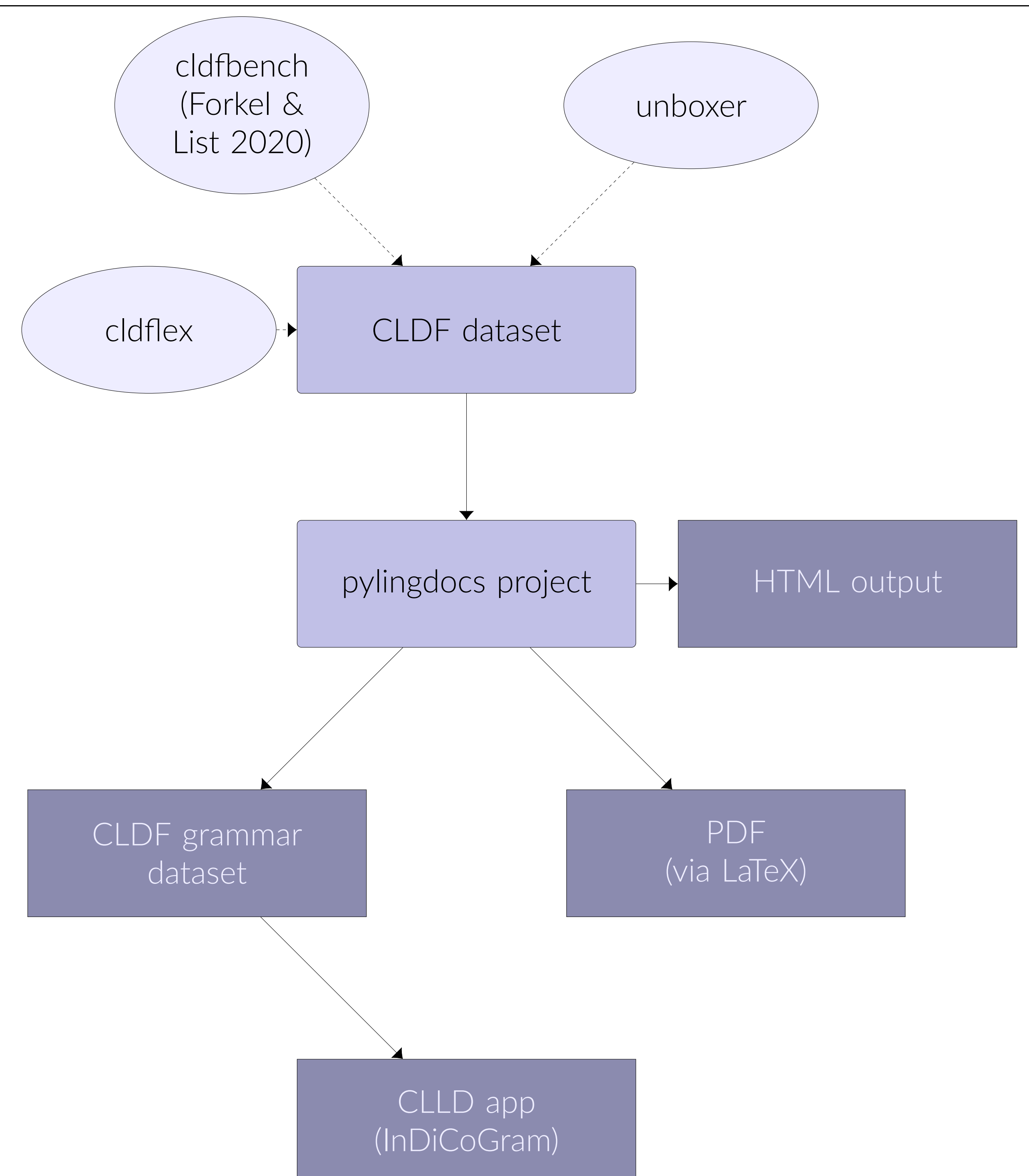
Interactive output

- InDiCoGram: interactive, digital, corpus-based grammar (Matter 2022b)
- lightweight CLLD template using several plugins
- everything is a link (almost)
- audio!
- example: yawarana-sketch.herokuapp.com

Current database tables



Workflow



References

- Forkel, Robert & Johann-Mattis List (May 2020). "CLDF-Bench: Give Your Cross-Linguistic Data a Lift". English. In: *Proceedings of the Twelfth Language Resources and Evaluation Conference*. Marseille, France: European Language Resources Association: 6995–7002. ISBN: 979-10-95546-34-4. URL: <https://aclanthology.org/2020.lrec-1.864>.
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- (June 2023a). *cldf-ldd*. Version 0.0.6. URL: <https://github.com/fmatter/cldf-ldd>.
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- McDonnell, Bradley, Andrea L. Berez-Kroeker & Gary Holton, eds. (2018). *Reflections on Language Documentation: 20 Years after Himmelmann 1998*. Honolulu: University of Hawai'i Press.
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¹See Nordhoff (2012)
²github.com/cldf/cldfviz/