



The Sign Language Dataset Compendium

Creating an Overview of Digital Sign Language Resources

Maria Kopf, Marc Schulder, Thomas Hanke University of Hamburg, Institute of German Sign Language and Communication of the Deaf, Germany

Why?

- Identification of suitable sign language datasets challenging
- No single source of information
- Extensive literature review or word-ofmouth needed
- Amount of information varies widely
- Information distributed across different publications, data repositories and (potentially defunct) project websites

What is Described?

For Corpora

Languages: Languages of primary data; not including languages of annotation/ translation

Size: Token count, type count, recording hours, number of video clips, and/or file size

Participants: Publicly documented demographic information, such as number of participants, regions, age groups, gender distribution, and more

Metadata Format: File formats of machine-readable metadata

Translation: Amount and language of translations

Annotation: Amount of annotations, and conventions (paraphrased and/or with reference to published conventions)

Data Format: File formats of annotation/ translation data

For Lexical Resources

Languages: Signed and spoken languages used in resource

Size: Number of lexical items (signs or types)

Linguistic Information: ID-glosses, translational equivalents, citation form video, meanings, phonetic transcription or categorisations, frequency and other statistics, list of corpus occurrences, and more

For Corpora as well as Lexical Resources

Licence: Commonly used licence conditions such as Creative Commons or custom licences, link to the licence

Access: Identification of public and restricted parts, description of access

Webpages: Relevant websites such as project page, research dataset, portals for access by the general public, and more

Institutions: Universities and other organisations creating the dataset

References: Important bibliographic references, links to external lists of publications

September, 2023.

The Compendium

- Extensive overview of linguistic resources for sign languages around the globe
- Naturally used language by signers with L1 language proficiency
- Info tables with **structured information** in thematic categories
- Standardised but flexible format through free-form description
- Machine-readable metadata
- Pointers to data, project websites, literature references, etc.
- Interconnected entries, providing links between resources, tasks, and languages
- Available as website and static document
- Growing resource with regular updates



Where to Find It?

https://www.sign-lang.uni-hamburg.de/lr/compendium/



The Sign Language Dataset Compendium

Start | Corpora | Lexical Resources | Tasks | Languages

Dictionary of LESCO

The dictionary of LESCO was built on the basis of the <u>LESCO Corpus</u>. For missing semantic fields videos not selected for the corpus have been used, as well as advice from members of the Deaf community of San José.

Signs can be searched by Spanish gloss, handshape of the active hand and a thematic index.

Languages	Costa Rican Sign Language, Spanish
Size	1041 signs
Linguistic Information	Citation form, corpus examples, glosses and translations in Spanish, information on grammar and meaning
Licence	BY-NC-SA
Access	Public access via browsable homepage
Webpage	http://cenarec-lesco.org/DiccionarioLESCO.php
Institution	Centro Nacional de Recursos para la Educación Inclusiva (CENAREC)
Publications	Oviedo and Ramírez Valerio (2018)

References

 Alejandro Oviedo, Christian Ramírez Valerio (2018). "<u>The LESCO Corpus. Data for the Description of Costa Rican Sign</u>
<u>Language</u>". In: Proceedings of the LREC2018 8th Workshop on the Representation and Processing of Sign Languages: Involving the Language Community (Miyazaki, Japan). Ed. by Mayumi Bono, Eleni Efthimiou, Stavroula-Evita Fotinea, Thomas Hanke, Julie A. Hochgesang, Jette Kristoffersen, Johanna Mesch, Yutaka Osugi. Paris, France: European Language Resources Association (ELRA), pp. 167-170. ISBN: 979-10-95546-01-6.

This entry was last inspected on 11 April 2022.

The Sign Language Dataset Compendium The Sign Language Dataset Compendium The Sign Language Dataset Compendium Start | Corpora | Lexical Resources | Tasks | Languages Start | Corpora | Lexical Resources | Tasks | Languages Start | Corpora | Lexical Resources | Tasks | Languages Silvester and Tweety **ECHO Corpus** German Sign Language Canary Row" (Freleng, 1950) is a cartoon by Warner Bros. studios featuring Tweety the bird and Silvester the ISO 639-3: gsg The European Cultural Heritage Online (ECHO) corpus is a multilingual corpus containing video material from cat. The cartoon is used widely by sign language researchers to elicit classifier constructions. The cartoon is shown to one of the participants, who then should describe the story to their dialogue partner. As this task is Glottolog: germ1281 Acronym: DGS three SLs: Sign Language of the Netherlands, British Sign Language and Swedish Sign Language. Eight signers were recorded for 1.5 hours following the same tasks in each language. For Sign Language of the Nether and British Sign Language sign language poetry was added to the corpus. Additionally annotated segments of **English name:** German Sign Language the Gehörlos So! corpus of German Sign Language (Heßmann, 2001) were added to the corpus. The Echo Looney Tunes - Canary Row project was a 18-month EU funded project dedicated to bring Essential Cultural Heritage online. The ECHO corpus was built from 2003–2004 by the Max Planck Institute for Psycholinguistics, Radboud University and Corpora involving German Sign Language Filming took place in a studio with one or two signers at the same time. The signers were sitting or standing and Dicta-Sign Corpus depending on the task, recorded separately or closely next to each other. A single-coloured background was ECHO Corpus VIDI Sign Space Corpus British Sign Language, Sign Language of the Netherlands, Swedish Sign Language, German Sign Language Freleng (1950), available at https://vimeo.com/317665278 Task uses in corpora 1.5 hours recorded Lexical Resources involving German Sign Language Dicta-Sign Lexico Corpus Language DW-DGS HLex GLex DGS Corpus types lis 8648791d0c3d/?pg=1&hh_cmis_filter=imdi.topic/Canary Row cartoo GaLex SLex sematos Max Planck Insitute for Psycholinguistics, Radboud University Nijmegen, University of

Free and Hanseatic City of Hamburg. The Academies' Programme is coordinated by the Union of the Academies of Sciences and Humanities

How?

Method

- Literature review of 363 publications in the sign-lang@LREC Anthology
- Inspection of
- Additional literature
- Datasets
- Project websites
- Personal correspondence with data creators
- Language specific curation criteria depending on size and number of available resources

Curation Criteria

General criteria:

- Must include video data
- No sign-supported systems
- No language acquisition data
- 4. No historical sign languages
- Data must be attainable

For corpora

- 6. Must be (semi-)spontaneous signing
- 7. L1 signers
- 8. Data must have at least a partial translation and/or gloss annotation
- 9. At least 5 hours (minimum) or 10 hours (strict) of sign language recordings.

For Lexical Resources:

- 10. Must include index
- 11. At least 100 (minimum) or 1000 (strict) different signs.

For data collection tasks:

12. Used by multiple resources

What are Commonly Used Tasks?

Stimulus: Description of stimulus provided to participants

Target: Linguistic phenomena intended to elicit

Degree of Interaction: Estimate of amount of interaction, reason for given degree

Duration: Estimate of duration of the task. based on instances observed in corpus data or published documentation

Source: References to material (e.g. books, films) or related scientific publications

Which Corpus Uses which Task?

recordings - open access: Number of recordings publicly available

recordings - closed access: Number of recordings non-publicly available

Data available: Links to corpus recordings of this task with disambiguating notes to help find the task on the referenced page

