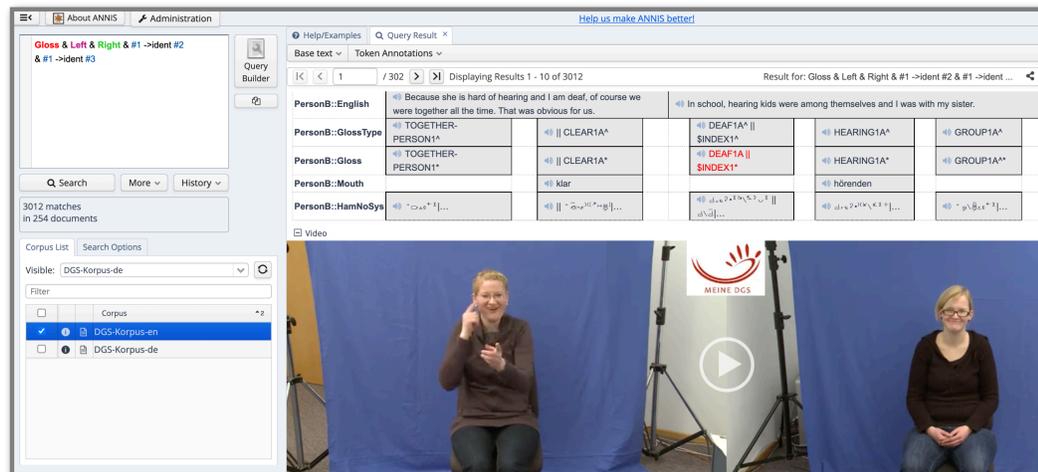


MY DGS – ANNIS

- Browser-based **search and visualisation tool** for the Public DGS Corpus data
- Accessible without login
- URL: <https://annis.meine-dgs.de>
- Queries over multiple transcripts in multiple tiers, including metadata, and with customized range of neighbouring tokens
- View query results and play video segment
- Frequency analysis view
- Export query results as csv for further processing
- Share queries and results as URLs



Query on DGS-Korpus-en (English annotations) for tokens where two signs are articulated simultaneously (one with each hand), displaying first of 3012 matches

DGS Annotation Tiers in ANNIS

DGS-Korpus-en (English annotations)

- Gloss** subtypes or types used to lemmatize tokens
- GlossType** parent types
- HamNoSys** type citation forms in HamNoSys
- Mouth** mouthings or mouth gestures for each utterance
- English** translation for each utterance
- Right** **Left** whether a sign was carried out with the right or left hand

Konrad et al. (2020). Public DGS Corpus: Annotation conventions. Project Note AP03-2018-01, DGS-Korpus project. DOI: [10.25592/uhhfdm.822](https://doi.org/10.25592/uhhfdm.822)

Research Use Cases with ANNIS

Lexical Negation – Gloss and Mouthing

DGS-Korpus-de (German annotations)

1. Search for German negation words e.g. “kein”, “keine”, “keiner” etc.
`Deutsch =/. * kein(e[srmn]?)? .*/ & Gloss & #2 ->ident #1`
2. Save frequency analysis as csv and further process in spreadsheet to identify frequent gloss names
3. Query for these gloss names to find mouthings and mouth gestures e.g.
`Gloss=/. *KEIN.* / ->ident Mundbild`

Irregular Negatives

Search for mouthings with more than one word where the second is “nicht” co-articulated with a gloss which deviates from the citation form (marked with * in the Public DGS Corpus).

`Mundbild=/. *[a-z] nicht.* / & Gloss=/. * */ & #2 ->ident #1`

Lexical Negation – NONE

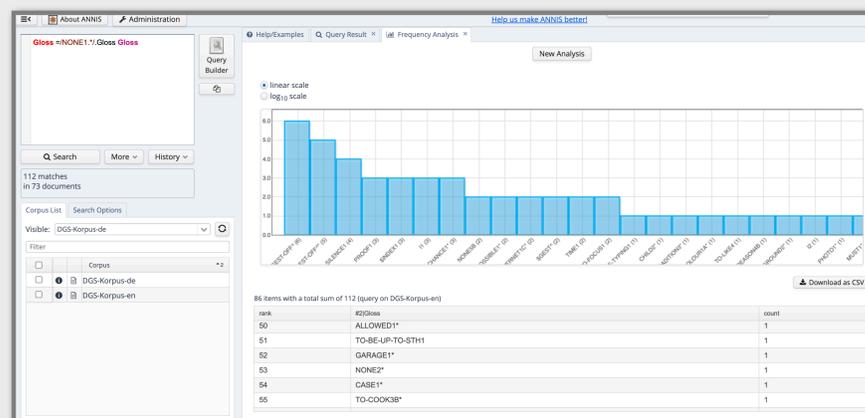
DGS-Korpus-en (English annotations)

Papaspyrou et al. (2008) hypothesise that NONE1 (KEIN1) can only refer to nouns.

1. Search for all glosses which immediately follow NONE1
`Gloss =/NONE1.* / .Gloss Gloss`

Analysis of the results finds glosses like ALLOWED1, CAN2A, TO-LIKE4, MUST1, GOOD1, RIGHT-OR- CORRECT1B, NONE2, and TO-COOK3B

2. Refined query allows analysis of tokens in context
`Gloss=/(NONE1.* / .Gloss Gloss=/(ALLOWED|CAN|TO-LIKE).*/`



Papaspyrou et al. (2008). Grammatik der deutschen Gebärdensprache aus der Sicht gehörloser Fachleute. Seedorf: Signum.

ANNIS Query Language (AQL)

Exact string match with = "text"

`Gloss = "TRAIN2A"` all gloss tokens which match the string TRAIN2A

Regular expressions with = /text/

`Gloss = /TRAIN.* /` all gloss tokens which match the regular expression TRAIN.*

Negation with !

`English != /.*train.* /` all English translations which **do not** match the regular expression .*train.*

Combination with &

Distance with the dot operator . and the Gloss tier

`Gloss = /TRAIN.* / & Gloss = /.* / & #1 .Gloss #2`

All gloss tokens which directly follow a gloss token in the same tier which matches the regular expression TRAIN.*

Links between tiers from same participant with ->ident

`Gloss = /TRAIN.* / ->ident English != /.*train.* /`

All gloss tokens which match TRAIN.* and overlap with an English translation tag from the same participant which does not match .*train.*

Metadata queries with @*

`Gloss = /TRAIN.* / @* RegionCode="SH"`

All gloss tokens which match TRAIN.* from a participant whose region code is SH (Schleswig-Holstein)

Metaphorical Use of Signs

DGS-Korpus-en (English annotations) or DGS-Korpus-de (German annotations)

Analyse the use of the brain = cognition metaphor by searching for gloss tokens whose type has a location at the forehead region (HamNoSys: ☹)

`GlossType & HamNoSys=/. * ☹ .*/ & Gloss & #3 ->ident #1 & #3 ->ident #2`

Results contain 3,500 tokens of four lexical or phonological type variants all glossed by TO-KNOW-OR-KNOWLEDGE, 148 tokens of the type TO-COMPREHEND114, and 10 tokens of types glossed EXPERT.

Also look for the subtypes' gloss names as they can indicate conventionalized uses of the sign like MENTALLY2, a subtype of BRAIN1A with repeated movement.