\glinlines

FILES

- glinlines-demo2.pdf: this document.
- glinlines-demo2.tex: code for this document.
- in-glinlines2.tex: macro code.
- in-glossing.tex: user input file for PoS glossary.

The \glinlines macro The \glinlines{} macro provides for an unlimited number of word-for-word interlinear text/gloss lines, and an unlimited number of free-form text lines for translations, notes, etc.

The macro can be used inside the linguistic example environment (exe) of the gb4e package, standing in place of the \glasses 1... commands in some cases.

```
\begin{exe}
\ex
\gll Wenn jemand in die Wüste zieht und ... \\
If someone in the desert draws and ... \\
\trans `if one retreats to the desert and ... '
\end{exe}
  produces:
  (1) Wenn jemand in die Wüste zieht und ...
           someone in the desert draws and ...
      'if one retreats to the desert and ... '
  The \glinlines{} equivalent is:
\begin{exe}
\ex
\glinlines{%
       Wenn jemand in die Wüste zieht und ...
*/
       If someone in the desert draws and ...
qlt
       `If one retreats to the desert and ... '
\end{exe}
  and produces:
```

(2) Wenn jemand in die Wüste zieht und ... If someone in the desert draws and ... 'If one retreats to the desert and ... '

The number of words in the text/gloss lines currently must be equal. Lines are delineated with */ (arbitrarily chosen, can be set to some other string).

Words are split out by spaces. "they-have" is one word, "they have" is two words. Braces, which have a special meaning to T_EX, can be used to group words, in effect shielding everything they contain from being seen: "{they have}" counts as one word. Because braces are eventually stripped out before printing, their presence affects the working of any attach-commands that \glinlines{} might use.

Free-form text as a translation (or any other matter) is introduced with glt (likewise arbitrary) as the default marker.

Multiple glosses are possible:

(3) Auto uderzył dziecko.
car.NOM hit.3sG child.ACC
car.ACC hit.3sG child.NOM
'The car hit the child.' / 'The child hit the car.'

Each text/gloss line (the word-for-word lines, WFW), can have one or more free-form text lines (FFT) attached.

The unstarred version of the macro, \glinlines{}, will print the FFT line(s) attached to the last WFW line. The starred version, \glinlines*{}, will print all FFT lines.

(4) Auto uderzył dziecko. car.NOM hit.3sG child.ACC 'The car hit the child.' car.ACC hit.3sG child.NOM 'The child hit the car.'

The WFW lines can hold anything, not just glossing, as long as the number of words (i.e., ungrouped spaces) matches.

The FFT lines likewise can contain anything, not just translations.

(5) gef hundinum matinn gje hunden maten give the dog the food gib dem Hunde das Essen One of the daily chores.

Source Reference

https://tex.stackexchange.com/questions/156066/align-glosses-in-more-than-one-language-with-gb4e

~~~~~

The \glsetfirstlineformat{} command will apply its contents to every word on the first line, e.g., font, font size, font colour.

To keep the spaces pristine as word-boundary markers, commands to be applied inside a line are marked with a colon (:) and suffixed to a word, e.g., <a href="ugrt:writing">ugrt:writing</a> becomes <a href="ugrt writing">ugrt</a> writing, which typesets as "ugrt "".

An ancient city in the east Mediterranean.

Also known as Ras Shamra ("head fennel" = Cape Fennel),

رأس شمرة

**New line** Post-pend a plus sign (+) to the word prior to where the new line should occur and use ++ for an actual plus sign, e.g., "Mink.+", "Mink++":

(7) thu-mi-t-əm =k'wa Mink.
go.RIL.CTR.PASS =.QUOT Mink
chichiya7-u-s =k'wa Mink+ te= c'estaya.
grandmother.PST.3POSS =.QUOT Mink .DET= knothole
'Mink went towards it. The knothole was Mink's grandmother.'

#### Source Reference

https://tex.stackexchange.com/questions/306764/breaking-l
ine-in-gb4e

Switching over to italic blue for the first line.

Notice the emphasized e, subscript i,  $e_{\rm i}$ , inside an italic environment. Emulate paragraph indentation with the usual space command(s) such as \quad.

(8) a delak a uleker er ngak el kmo ng-ngerai a sensei mother-my asked P me L Comp CL-what teacher a milskak a buk me a Toki a ulterur e<sub>i</sub> er ngak gave book and Toki sold P me
'My mother asked me what the teacher gave me a book and Toki sold me'

```
To do: outdent; multi-newlines.
```

Source Reference

```
https://tex.stackexchange.com/questions/115591/how-can-i-indent-the-second-line-of-a-linguistic-gloss-with-gb4e-sty/115607#115607
```

**Prepend commands** To prepend a command to a word, mark the command's finish with a semicolon (;), e.g., :llapstar; `The becomes \lapstar `The which becomes ""'The". (The \llap{} command is used here to overprint the \* to the left, so that the text aligns vertically.)

```
(9) bites dog cat
verb dd cc
'The dog bites the cat.'
*'The cat bites the dog.'
```

#### Source Reference

```
https://tex.stackexchange.com/questions/306564/left-edg
e-vertical-alignment-in-gb4e
```

**Dot Prefix** Words (i.e., made up of letters A-Z, a-z, and digits 0-9) beginning with a dot are treated as parts of speech and their formatting is governed by the \mfssetposformat{} command, e.g., with

### Source Reference

https://tex.stackexchange.com/questions/184860/gb4e-leave s-extra-space-before-translation/184862#184862

### Patching the example number format

11. *Dies ist ein Beispiel*This is an example

'I saw you.' (S1:71)

( )  $\mapsto$ . : \usepackage{gb4e} \usepackage{etoolbox} \makeatletter \patchcmd\ exe {(\thexnumi)} {\thexnumi.} {}{\} \makeatother

**Global settings** The \mfssetposformat{} formatting continues to apply from one example to the next, like a global switch.

```
Saja mem-bawa surat itu kepada Ali.
           .CAUSE-bring letter the to
                                        Ali.
      I brought the letter to Ali.
Source Reference
https://tex.stackexchange.com/questions/337817/using-gb4
e-inside-of-enumerate-environment/338093#338093
Attaching commands Use : commandA; na: commandB to achieve
  \commandA na \commandB
  e.g., upright brackets:
:uplb;na:uprb \mapsto (na).
 (13) nyumba i-na-on-ek-a
                                 (na) wa-tu
      house(9) 9-.PRS-see-.NEUT-.FV (.COM) 2-person
      intended: '(A/the) house is seen by people.'
      e.g., upright double quotes :uplqq;x:uprqq;.
                     kwamba "na-m-ju-a"
(14) a-li-sem-a
      1-.PST-speak-.FV .COMP
                             .1sg.prs-1-know-.fv
      'He said, "I know him."
Source Reference
https://tex.stackexchange.com/questions/308454/gb4e-overw
rite-italics-in-first-line
Adding information to the right is done with
  \glinlinesnote{ gloss example }{ note }.
\begin{exe}
\ex
    \glinlinesnote{%
      Das ist ein deutsches Beispiel.
     this is a
                  German
                              example
     }{German}
\end{exe}
```

## produces

(15) Das ist ein deutsches Beispiel. this is a German example

(German)

### A longer sentence:

- (16) Das ist einer dieser sehr langen Sätze, die es in der a this is one of-these very long sentences that it in the a b deutschen Sprache gibt.
   b German language gives
- (17) Das ist einer dieser sehr langen Sätze, (German) this is one of-these very long sentences die es in der a b deutschen Sprache gibt. that it in the a b German language gives

  This item has a language note.

#### Source Reference

https://tex.stackexchange.com/questions/600695/limiting-space-used-by-gb4e-and-adding-language-information-to-the-right

**Extended commentary** The example can be almost all free-form text (i.e., glt -tagged material):

(18) On the honeydew melon<sup>1</sup>

The honeydew melon is one of the two main cultivar types in Cucumis melo Inodorus Group. It is characterized by the smooth rind and lack of musky odor.

Το πεπόνι χάνεϊντι, γνωστό και ως μελοπέπονο, είναι φρούτο της ποικιλίας muskmelon ή Cucumis melo της οικογένειας των κολοκυνθοειδών. Η ομάδα αυτή των Inodorus περιλαμβάνει το συγκεκριμένο πεπόνι αλλά και άλλα ανάμεικτα είδη πεπονιού και κολοκύθας.

El melón verde, melón blanco, casaba, melón rocío de miel o melón tuna es un fruto de la familia del melónCucumis melo (Cucumis melo) que se cultiva en general para el consumo gastronómico. La fruta es similar al melón anaranjado o cantalupo, pero tiene un sabor más dulce, contiene más agua y posee un color verde pálido

o claro en su interior.

Le melon honeydew, ou melon miel, est un melon du groupe de cultivars de l'espèce Cucumis melo (famille des Cucurbitaceae). Le groupe Inodorus inclut le melon honeydew, le melon musqué, le melon d'hiver et d'autres hybrides du melon.

Il melone verde è un gruppo di colture appartenente al gruppo Inodorus della specie dei Cucumis melo.

Tale gruppo comprende oltre al melone verde anche il melone persiano, di inverno, casaba e crenshaw.

This example also illustrates the use of custom markdown commands and their attachment as postfixes, acting on the word they are attached to: <a href="https://honeydew.space;melon">honeydew.space;melon</a>, to be seen as one 'word', to which the \tikz command (an overlaid green bounding box with red text) is applied as the pattern <a href="https://word.space.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.google.googl

honeydew::ttikz; produces (in example 19a):

- (19) (a) The honeydew melon
  (b) .ART .PROD.MET.ATTR .FRUIT
- (20) Naoya-wa Mari-ga Nani o Non-da ka Yumi-ni it-ta
  Naoya-Top Mari-Nom what-Acc drink-Past Q Yumi-Dat it-Past
  no?
  Q?
  '(Lit.) For which x, x a thing, Naoya said to Yumi whether Mari drink x.'

**Word-numbering** can be switched on with \mfsnumberedwordson.

(21) Naoya-wa<sup>1</sup> Mari-ga<sup>2</sup> Nani -o<sup>3</sup> Non-da<sup>4</sup> ka<sup>5</sup> Yumi-ni<sup>6</sup>
Naoya-Top<sup>1</sup> Mari-Nom<sup>2</sup> what-Acc<sup>3</sup> drink-Past<sup>4</sup> Q<sup>5</sup> Yumi-Dat<sup>6</sup>
it-ta<sup>7</sup> no ?<sup>8</sup>
it-Past<sup>7</sup> Q?<sup>8</sup>

'(Lit.) For which x, x a thing, Naoya said to Yumi whether Mari drink x.'

<sup>&</sup>lt;sup>1</sup>Text from various Wikipedias.

**Word-stacks** are vbox es and can be formatted with \mfsformattedvboxon.

```
θέλω
                     δè
(22)
      οὐ
                                      άννοεῖν,
                                                          άδελφοί,
                          ύμᾶς
           thelō
                     de
                          humas
                                      agnoein
                                                          adelphoi
      ou
                                                         brothers.Voc
                    but you.Acc.PL be-ignorant.PRES.INF
      not
          want.1SG
      őτι
           πολλάκις
                     προεθέμην
                                   έλθεῖν
      hoti polakis
                      proethemēn
                                   elthein
                      planned.1SG
      that often
                                   come.Aor.Inf
```

But I don't want you to be unaware, brothers, that many times I planned to come.

(Rom 1.13)

The default style is \colorbox{blue!12}. It can be changed by setting the [wordstackstyle = ...,] option,

e.g.,

[wordstackstyle = {\fcolorbox{blue}{red!8}},]
produces:

- άννοεῖν (23)οů θέλω δè ὑμᾶς ou thelō de humas agnoein be-ignorant.Pres.Inf want.1SG but you.Acc.PL not
- (24) w-for-w line 1
  w-for-w line 2
  w-for-w line 3
  w-for-w line 4
  Line 4, Trans A
  Line 4, Trans B
  Line 4, Trans C
- (25) w-for-w line 1
  Line 1, Trans A
  Line 1, Trans B
  Line 1, Trans C
  w-for-w line 2
  Line 2, Trans A
  Line 2, Trans B
  Line 2, Trans C
  w-for-w line 3
  Line 3, Trans A
  Line 3, Trans B
  Line 3, Trans C
  w-for-w line 4
  Line 4, Trans A
  Line 4, Trans B

## option key preamble=

(26) SOMEBODY HAS ARRIVED LATE.

#Ich bin schon da

I am already there

'I am here already.'

#### Source Reference

https://tex.stackexchange.com/questions/308008/gb4e-phantom-spacing

In plain code, square brackets on the first word is an issue, since an  $\lceil \ldots \rceil$  will set the item dotpoint to whatever "..." is, but is not an issue with  $\lceil \ldots \rceil$ 

- (27) [This] a is an example which displays properly.

  No special treatment, uses [This]
- (28) \*
  [This] b is an example which displays properly (not).
  uses \ex[\*]
- (29) \*[This] c is an example which displays properly.
  uses llapstar

#### Source Reference

https://tex.stackexchange.com/questions/590883/how-to-use
-gb4e-to-produce-glossed-example-with-bracket
 Text, see footnote<sup>2</sup>

(30) Text<sup>3</sup>, text, text.

Text<sup>4</sup>, text, text.

Text<sup>5</sup>, text, text.

Text is here<sup>6</sup>, text, text.

 $\label{lem:https://tex.stackexchange.com/questions/334636/using-gb4e-to-insert-footnote-in-gll-line$ 

<sup>&</sup>lt;sup>2</sup> This is a footnoted example.

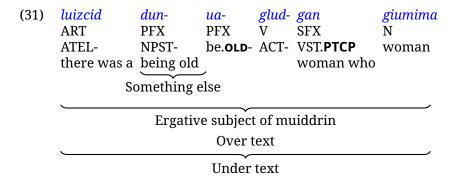
dA V iA Adj

<sup>&</sup>lt;sup>3</sup>A footnote.

<sup>&</sup>lt;sup>4</sup>A footnote.

<sup>&</sup>lt;sup>5</sup>A footnote.

<sup>&</sup>lt;sup>6</sup>A footnote: Source Reference



### Source Reference

https://tex.stackexchange.com/questions/355934/horizonta
l-curly-braces-in-expex-glossing-example

**Right-to-Left** See the example (uses polyglossia).

**Even height and depth** with an invisible \vrule.<sup>7</sup>

#### tfeL-ot-thgiR τω-δευτέρω έτει εν τω do reinado ano-segundo No haqiqat muthabatat hunak installed reality there Ναβουχοδονόσορ βασιλείας Nabucodonsor sonhou de Nabucodonosor X Х tawil mundh zaman long time ago

<sup>&</sup>lt;sup>7</sup>The second, third and fourth lines are just dummy text.



'There is a long-established fact that the readable content of a page will distract the reader from leaving.'

### Source Reference

https://tex.stackexchange.com/questions/317589/arabic-rus sian-interlinear-text/317703#317703

## **Reset line formats** with \glresetlineformats.

(33) x y z a b c a b c a b c a b c a b c a b c a b c

Subscripts and Superscripts with  $\glsub{}$  and  $\glsuper{}$ . These are wrappers for the  $\arrowvert \ensuremath{\text{IMT}_E\!X} \textsubscript{}$  and commands.

```
\begin{array}{cccc} \text{(34)} & x_a & y_\alpha & z_b \\ & a^x & b^y & c^z \end{array}
          a_1 b_2 c_3
          <sub>1</sub>a <sub>2</sub>b <sub>3</sub>c
          <sup>x</sup>a <sup>y</sup>b <sup>z</sup>c
          a b e_i
x:suba; \mapsto x_a
                                                       c::qlsub!3; \mapsto c_3
y:subalpha; \mapsto y_{\alpha}
                                                       ::glsub!1;a \mapsto 1a
z::qlsub!b; \mapsto z_b
                                                       ::glsub!2;b \mapsto 2b
a::glsuper!x; \mapsto a^x
                                                       ::qlsub!3;c \mapsto 3c
b::glsuper!y; \mapsto b^y
                                                       ::glsuper!x;a \mapsto ^{x}a
c::qlsuper!z; \mapsto c^z
                                                       ::qlsuper!y;b \mapsto yb
a::glsub!1; \mapsto a_1
                                                       ::qlsuper!z;c \mapsto ^{z}c
b::glsub!2; \mapsto b_2
                                                       e::glsub!i; \mapsto e_i
```

**Single-item Sequence as Input Line** An item that will be used multiple times can be stored once and retrieved multiple times.

(35) The cat sat on the mat.
The cat sat on the mat!
The cat sat on the mat?
The cat sat on the mat??

How To: The command  $\mbox{\mbox{$mfsloadaseql takes four parameters: [namespace (optional)] { sequence name } { separator } { (multiline) data } so that $$\mbox{\mbox{$mfsloadaseql {cat } {.} { The cat sat on the mat. } loads $$ The cat sat on the mat. } And the command $$\mbox{\mbox{$mfsuseaseql { sequence name } { output delimiter } } $$ retrieves it.$ 

**Sequence item as Input Line** Multiple items can be stored as records in a sequence and then retrieved from that sequence by record number. For examples, sentences in a narrative.

```
(36)
     Many Volcanoes Erupt Mulberry Jam Sandwiches.
      The cat sat on the mat.
      The quick brown fox jumps over.
  Storing:
\mfsloadaseql{dog}{*/}{%
The cat sat on the mat.
*/ The quick brown fox jumps over.
*/ Many Volcanoes Erupt Mulberry Jam Sandwiches.
}
  Retrieving:
\glinlines{%
       \mfsuseaseqli{dog}{3}
*/
      \mfsuseaseqli{dog}{1}
*/
      \mfsuseaseqli{dog}{2}
}
Using a lookup table A property list can store (case sensitive) key =
value pairs as records, and value can be retrieved with \mfsgetapropkv
{ propertylist name } { key }.
  Storing:
\mfsloadaprop{cat}{%
The=1
,cat=2
,sat=3
on=4
,the=5
,mat=6
,mat.=7
}
  Retrieving the value attached to key the = 5.
\mfsqetapropkv{cat}{the}
```

Auto-attaching a command to every word on a line The option [addca = pkvcat] will postfix the example custom command \pkvcat to every word on line a (the first line). The first three lines (addc[a-c]) have this built-in addc-ability.

(37) 1 2 3 4 5 7 1 2 3 4 5 6. pkvcat added manually (note the dot) The cat sat on the mat. source text

# **Doing lookups**

addca= addcc=

| •    | -     |        |                |       |          |       |         |                         |         |           |           |         |           |  |
|------|-------|--------|----------------|-------|----------|-------|---------|-------------------------|---------|-----------|-----------|---------|-----------|--|
| (38) | G1722 | G3588  | G2094          | G3588 | 38 G1208 |       | 3       | G3588                   |         | G932      |           | *       |           |  |
|      | εν    | τω     | έτει           | τω    | δευτ     |       | έρω     | της                     |         | βασιλείας |           | Ναβου   | χοδονόσορ |  |
|      | in    | the    | year           | the   | secor    |       | nd      | of-the                  |         | reign     |           | Nebuch  | nadnezzar |  |
|      | G1797 |        | *              |       |          |       | G179    | '98                     |         | G2532     | G18       | 39      |           |  |
|      | ενυπν | ιάσθη  | Ναβου          | σορ   | ενύ      |       | τνιον μ |                         | και εξέ |           | στη       |         |           |  |
|      | dream | ed     | Nebuchadnezzar |       |          | a-dr  |         | eam                     | am a    |           | d was-sta |         |           |  |
|      | G3588 | G4151  | G147           | '3 G2 | 532      | G3588 |         | G5258<br>ὑπνος<br>sleep |         | G1473     |           | G1096   |           |  |
|      | το    | πνεύμ  | α αυτ          | ού κο |          |       | )       |                         |         | αυτ       | ού        | εγένετο |           |  |
|      | the   | spirit | his            | an    |          |       | he      |                         |         | his       |           | went    |           |  |
|      | G575  | G1473  |                |       |          |       |         |                         |         |           |           |         |           |  |
|      | απ΄   | αυτού  |                |       |          |       |         |                         |         |           |           |         |           |  |
|      | from  | his    |                |       |          |       |         |                         |         |           |           |         |           |  |

The gloss contains the same Greek, three times.

The first line is doing a lookup of the strong property list which contains (unique) entries of the sort  $\epsilon \nu = G1722$ , word to Strong Concordance number: [addca=pkvstrong], which uses \mfsgetapropkv.

The second line is the Greek text left as-is.

The third line is doing a lookup of the nabeng property list which contains (unique) entries of the sort  $\epsilon v = in$ , word to English translation: [addcc=pkvnabeng], which uses \mfsgetapropkv.

General formating is:

```
\glsetfirstlineformat{\footnotesize\ttfamily}
\glsetsecondlineformat{\selectlanguage{greek}\color{blue}{%
\vrule height 12pt depth 6pt width 0pt}}
\glsetthirdlineformat{\small}
\mfsformattedvboxon
```

## Using options to attach commands to specific words



```
(39) (a) The (b) 1 2 3 4 5 7 (c) The cat sat on the mat. 2 3 4 5 7
```

The option addcaw=2;doemph, is applying the command doemph to word 2 of line (a).

The option addcb=pkvcat, is applying the command pkvcat to every word of line (b).

The option addccw=6; doemph, is applying the command doemph to word 6 of line (c).

The option addcxa=3;1;doemph, is applying the command doemph to word 1 of line (c).

The option linenumsa=true, displays the (first six) line numbers as lower case alphabetic.

Inline lookup

**An inline lookup** "Cat" is word 2 in the lookup.

Done with:

``Cat'' is word
{\glinlines[addcaw=1;pkvcat]{cat}}
in the lookup.

Inline gloss

Here is an example, Naoya-wa Mari-ga , of some inline glossing. Naoya-.**Top** Mari-.**Nom** 

**Separator string** The \glinlines assumes that the line separator markup is \*/. The underlying macro \glinlines base takes the separator string as a parameter (namespace, sequence name, separator string, data), so that

\glinlinesbase[gloss]{sep}{xx}{AtextxxBtext}

0 = sequence namespace, @= sequence name, @ = delimiter, @ = delimited data

uses xx as separator and produces  $\ensuremath{\mathsf{Atext}}$  . The  $\ensuremath{\mathsf{linesep}}$  option passes  $\ensuremath{\mathsf{Btext}}$ 

the line separator through, so that

# Attaching multiple commands to one word

addcxa= addcaw= addcxb= (40) (a) **The** cat sat on the mat.  $e_i$ 

How To addcaw=1;textbf, makes the first word (1) on the first line (a) bold (textbf). There are 3 line-based options like this: addcaw, addcbw, addccw, for the first, second and third lines respectively.

addcxa=1;1;textit,, line;word;command format, makes the first word (1) on the first line (1) italic (textit). There are 6 options like this: addcx[a-f]. They can refer to any line, including the same one.

addcxb=1;1;underWavy, , the first word of the first line is underlined with a wavy line.

addcxc=1;7;textit, makes the seventh word (7) on the first line
(1) italic (textit).

(41) The cat sat on the mat.  $e_i$ 

**Highlighting a Wordstack** A wordstack can be styled with addwsa=. For example, addwsa=2;textredit <sup>8</sup> makes the second wordstack red italic. Up to three wordstacks and be highlighted (addws[a-c]).

addwsa=

```
(42) The cat sat on the mat.
```

```
(43) (a) 我 没 有 问 题
(b) wǒ méi* yǒu* wèn tí
(c) I no have ask question
```

'I don't have questions.'

[Line (b) does a lookup of the xpinyin-database.def. \* = first of multiple readings.]

<sup>&</sup>lt;sup>8</sup>Defined as \newcommand\textredit[1]{\textcolor{red}{\textit{#1}}}.

### Standalone commands

### Note \qlnote{}

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetuer id, vulputate a, magna.

(44) Das ist ein deutsches Beispiel. this is a German example (German)

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetuer id, vulputate a, magna.

(45) Das ist einer dieser sehr langen Sätze, die es (German) this is one of.**THESE** very long sentences that it in der a b deutschen Sprache gibt. in the a b German language gives

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetuer id, vulputate a, magna.

~~~~~

Parallel \qltwoex{}

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetuer id, vulputate a, magna.

(46) Das ist ein deutsches this is a German Beispiel. example (47) Das ist einer dieser sehr this is one of-these very langen Sätze, die es in der long sentences that it in the a b deutschen Sprache gibt. a b German language gives

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetuer id, vulputate a, magna.

```
(48) The quick brown fox
                            (49) The cat sat on
                                                 the mat.
     DA ADJ1 ADJ2 N
                                 DA N V PREP DA N
     jumps over the lazy
           PREP DA ADJ1
     V
     dog.
     N
                        ~~~~~
 我诸葛 亮 → wǒ zhū gé* liàng
 我诸葛亮 → wǒ zhū (gé,gě) liàng
 \xpppinyin*{我诸葛亮}
 Zhūgé Liàng, ...
 \xppname{诸葛亮}, ...
 Zhūgě Liàng, ...
 \xppname[mpya=2;2]{诸葛 亮}, ...
 (qí,dàn,chú) (yí,yà,yá) (săn,chěn,càn)
 ✓3:2:3 Chúyà Càn
 ✓1:1:2 Qíyí Chěn
 ✓ 2:3:- Dànyá Chěn
 ✓-:-: Dànyá Chěn
 ✓-:-:2 Dànyá Chěn
 ✓-:-: Dànyá Chěn
 ✓1:1:2 Qíyí Chěn
 ✓-:-: Qíyí Chěn
 ✓-:-:2 Qíyí Chěn
 ✓-:-: Qíyí Chěn
 Qíyí Chěn
 鷄齷鰺 Qíyí Chěn
 \xppname*[mpya=3;2,font=\cjkb\color{blue},]{鷄齷 鰺}
```

Meta Commands xxx

```
\speech → (*)
\writing → 
\uplb → (
\uprb → )
\uplq → '
\uprq → '
```

```
\uplqq \mapsto "
   \uprqq → "
   \emphe \mapsto e
   \setminus suba \mapsto a
   \setminus subi \mapsto i
   \mathbb{R} \mapsto x
   \begin{tabular}{ll} \beg
   \bffcolorbox{zzz} → zzz
   \llaphash{zzz} ⊢#zzz
   \llapstar{zzz} →*zzz
   \glcmd{zzz} \mapsto \zzz
   \glue{1.5} \glue{1.5
   \gline {zzz} \mapsto zzz
   \glsub\{zzz\} \mapsto_{zzz}
   \gluon 
   \subalpha{zzz} \mapsto \alpha zzz
\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\pro
\dots
```

sold me'

(50) **SpeakerA** a delak a uleker er ngak el kmo ng-ngerai a sensei mother-my asked P me L Comp CL-what teacher a milskak a buk me a Toki a ulterur e_i er gave book and Toki sold me

'My mother asked me what the teacher gave me a book and Toki

~~~~~

| SpeakerB            | a delak<br>mother-my |               |  | 0 |  |             |          |  |
|---------------------|----------------------|---------------|--|---|--|-------------|----------|--|
| a sensei<br>teacher | a milskak<br>gave    | a buk<br>book |  |   |  | $e_{\rm i}$ | er<br>me |  |

'My mother asked me what the teacher gave me a book and Toki sold me'

### (Related) Source Reference

https://tex.stackexchange.com/questions/632989/custom-xlist-environment-for-simplistic-speaker-labels-in-gb4e/633644#633644

**Parts-of-speech Glossary** The PoS Glossary is automated: Items for the parts-of-speech glossary are collected when <code>glossary=</code> option is set to true; and printed with \printglossary[type=pos] (see the <code>glossaries</code> package). Definitions are loaded into a sequence via a manually edited input file, <code>in-glossing.tex</code>.

- (51) Ein-mal gibt es drei Bären...
  One-.ADV gave.3PS it.3PSPP three Bears...
  Once upon a time there were three Bears...
- (52) cew wee woman.**DEF** this/that.**DEM**To the woman

# Parts of Speech

```
3ps Third-person singular 20
3pspp Third-person singular personal pronoun. 20
adv Adverbial. 20
def Definite article. 20
dem Demonstrative article. 20
   The definitional file for the above is in-glossing.tex and contains:
\mfsloadaseq[leipzig]{glossing}{%
def;Definite article
,dem;Demonstrative article
,adv;Adverbial
,3ps;Third-person singular
,3pspp;Third-person singular personal pronoun
}
```

The expl3 sequence is sorted, loaded into a property list of key-value pairs (name, definition) and added to the glossary (type=pos) when used (and formatted).

'Ordinary' glossaries can be done the usual (manual) way. For example, cat and dog were glsed a few pages back, using cat::gls; meta code, producing:

# **Glossary of Cats and Dogs**

cat feline carnivore, member of the mammalian family, Felidæ. 18

dog canine carnivore, member of the mammalian family, Canidæ. 18

### Source Reference

```
https://tex.stackexchange.com/questions/699687/get-the-same-effect-of-the-leipzig-commands-with-the-typgloss-package
```

# Adhoc Override of PoS formatting .PoS-command;

For \uniq{} defined as

\newcommand\uniq[1]{{\normalfont\mdseries\itshape\color{red}#1}}

```
.PoS \mapsto .PoS
.PoS-uniq; \mapsto .PoS
```

(53) Ein-mal gibt es drei Bären...
One-.ADV gave.3PS it.3pspp three Bears...
Once upon a time there were three Bears...

**Prepending and postpending commands in general** Normal commands can be added to the text as markdown-style affixes, which are then processed as regular expressions.

Part of speech: .pos

```
text.pos \mapsto text.pos
```

Overlay PoS formatting: text.pos-command;  $\mapsto$  text.\command{pos}

```
text.pos-textit; \mapsto text.pos text.pos uniq; \mapsto text.pos
```

Command+argument: ::command!arg;  $\mapsto \c$ ommand{arg}

```
\texttt{textA}:: \texttt{textsubscript!n;} \; \mapsto \; \texttt{textA}_n
```

 $Command+word-as-argument: word::command; \mapsto \backslash command\{word\}$ 

```
text::textbf; → text
```

Command: :command;text  $\mapsto$  \command text

and

Command: text:command → text\command

```
text :Large;text:normalsize text → text text :tick;text:emphe → /texte :uplbrace;text:writing;:uprbrace → {text //} text::underWavy;; → text; text :UL;text text:LU;:gluline text text*/a b c d e → text text text a b c d e
```

### Usage Commands

USER COMMANDS glinlinesbase glinlines

**OPTIONS** 

preamble linesep wordstackstyle addca addcb addcc addcaw addcbw addccw addcxa addcxb addcxc addcxd addcxe addcxf linenumsa addwsa addwsb addwsc glossary

STANDALONE COMMANDS

glnote (right-hand side language note) glspeaker (speaker name) gltwoex (two examples) glmarker (circled numbers, 1) glruby (two-stacked 2

text, two)

To Do glrange

**FORMATTING** 

glusebox glinlinesnote glfirstlineformat glsetfirstlineformat glsecond-lineformat glsetsecondlineformat glthirdlineformat glsetthirdlineformat glsetfourthlineformat glsetfifthlineformat glsetfifthlineformat glsetsixthlineformat glsetsixthlineformat glsetsixthlineformat mfsperformat mfssetpreformat mfs

### **ADMIN COMMANDS**

mfsloadwords mfsuseaseql mfsuseaseqli mfsloadaseql textglossout transout mfsloadaseq mfsloadaprop mfssortaseq mfsgetapropkv mfsaddaprop mfsseqtoprop mfsuseaprop makenewge

SUNDRY COMMANDS marktext xpppinyin xppname

\*