Introduction

Interlinear morpheme-by-morpheme glosses are common in linguistic texts to give information about the meanings of individual words and morphemes in the language being studied. A set of conventions called the **Leipzig Glossing Rules** was developed to give linguists a general set of standards and principles for how to format these glosses. The most recent version of these rules can be found in PDF form at **this link**, provided by the Department of Linguistics at the Max Planck Institute for Evolutionary Anthropology.

There is a staggering variety of LaTex packages designed to properly align and format glosses (including `gb4e`, `ling-macros`, `linguex`, `expex`, and probably even more). These modules vary in the complexity of their syntax and the amount of control they give to the user of various aspects of formatting. The `typst-leipzig-glossing` module is designed to provide utilities for creating aligned Leipzig-style glosses in Typst, while keeping the syntax as intuitive as possible and allowing users as much control over how their glosses look as is feasible.

This PDF will show examples of the module's functionality and detail relevant parameters. For more information or to inform devs of a bug or other issue, visit the module's Github repository **neunenak/typst-leipzig-glossing**.

Basic glossing functionality

As a first example, here is a gloss of a text in Georgian, along with the Typst code used to generate it:

from "Georgian and the Unaccusative Hypothesis", Alice Harris, 1982

ბავშვ-ი	*ატირდა*
bavšv-i	aṭirda
child-NOM	3S/cry/INCHO/II

"The child burst out crying"

```
#gloss(
    header_text: [from "Georgian and the Unaccusative Hypothesis", Alice Harris,
1982],
    source_text: ([ბავშვ-ი], [ატირდა]),
    transliteration: ([bavšv-i], [aṭirda]),
    morphemes: ([child-#smallcaps[nom]], [3S/cry/#smallcaps[incho]/II]),
    translation: [The child burst out crying],
)
```

And an example for English which exhibits some additional styling, and uses imports from another file for common glossing abbreviations:

I'm	eat-ing	your	head
1SG.SBJ=to.be	eat-PROG	2SG.POS	head

"**I'm eating your head!**"

```
#import "linguistic-abbreviations.typ": *

#gloss(
  source_text: ([I'm], [eat-ing], [your], [head]),
  source_text_style: (item) => text(fill: red)[#item],
  morphemes: ([1#sg.#subj\=to.be], [eat-#prog], [2#sg.#pos], [head]),
  morphemes_style: text.with(fill: blue),
  translation: text(weight: "semibold")[I'm eating your head!],
)
```

The `#gloss` function has three pre-defined parameters for glossing levels: `source_text`, `transliteration`, and `morphemes`. It also has two parameters for unaligned text: `header_text` for text that precedes the gloss, and `translation` for text that follows the gloss.

If one wishes to add more than three glossing lines, there is an additional parameter `additional_gloss_lines` that can take a list of arbitrarily many more glossing lines, which will appear below those specified in the aforementioned parameters:

Hunzib (van den Berg 1995:46)

ождиг	*хоʷхе*	*мукъер*
oʒdig	χõχe	muqʼer
ož-di-g	xõxe	m-uqʼe-r
boy-OBL-AD	tree(G4)	G4-bend-PRET
at boy	tree	bent

“"Because of the boy, the tree bent.”"

```
#gloss(
    header_text: [Hunzib (van den Berg 1995:46)],
    source_text: ([ождиг],[хо#super[н]хе],[мукъер]),
    transliteration: ([oʒdig],[χõχe],[muqʼer]),
    morphemes: ([ož-di-g],[xõxe],[m-uq'e-r]),
    additional_gloss_lines: (
        ([boy-#smallcaps[obl]-#smallcaps[ad]], [tree(#smallcaps[g4])],
[#smallcaps[g4]-bend-#smallcaps[pret]]),
        ([at boy], [tree], [bent]),
    ),
    translation: ["Because of the boy, the tree bent."]
)
```

To number gloss examples, use `#numbered_gloss` in place of `gloss`. All other parameters remain the same.

(1) გვ-ფრცქვნ-ი
gv-prtskvn-i
1PL.OBJ-peel-FMNT
“You peeled us”

```
#import "linguistic-abbreviations.typ": *

#gloss(
    source_text: ([გვ-ფრცქვნ-ი],),
    source_text_style: none,
    transliteration: ([gv-prtskvn-i],),
    morphemes: ([1#pl.#obj\-peel-#fmnt],),
    translation: "You peeled us",
)
```

The displayed number for numbered glosses is iterated for each numbered gloss that appears throughout the document. Unnumbered glosses do not increment the counter for the numbered glosses.

The gloss count is controlled by the Typst counter variable `gloss_count`. This variable can be imported from the `leipzig-gloss` package and reset using the standard Typst counter functions to control gloss numbering.

Further Example Glosses

These example glosses replicate the ones given in **https://www.eva.mpg.de/lingua/pdf/Glossing-Rules.pdf**.

(1) Indonesian (Sneddon 1996:237)

Mereka	*di*	*Jakarta*	*sekarang.*
they	in	Jakarta	now

"They are in Jakarta now"

(2) Lezgian (Haspelmath 1993:207)

Gila	*abur-u-n*	*ferma*	*hamišaluǧ*	*güǧüna*	*amuq'-da-č.*
now	they-OBL-GEN	farm	forever	behind	stay-FUT-NEG

"Now their farm will not stay behind forever."

(3) West Greenlandic (Fortescue 1984:127)

palasi=lu	*niuirtur=lu*
priest=and	shopkeeper=and

"both the priest and the shopkeeper"

(4) Hakha Lai

a-nii	*-láay*
3SG-laugh	-FUT

"s/he will laugh"

(5) Russian

My	*s*	*Marko*	*poexa-l-i*	*avtobus-om*	*v*	*Peredelkino*
1PL	COM	Marko	go-PST-PL	bus-INS	ALL	Peredelkino
we	with	Marko	go-PST-PL	bus-by	to	Peredelkino

"Marko and I went to Perdelkino by bus"

(6) Turkish

çık-mak
come.out-INF

"to come out"

(7) Latin
insul-arum
island-GEN-PL
“of the islands”

(8) French
aux *chevaux*
to-ART-PL horse.PL
“to the horses”

(9) German
unser-n *Väter-n*
our-DAT-PL father.PL-DAT.PL
“to our fathers”

(10) Hittite (Lehmann 1982:211)
n=an *apedani* *mehuni* *essandu.*
CONN=him that.DAT.SG time.DAT.SG eat.they.shall
“They shall celebrate him on that date”

(11) Jaminjung (Schultze-Berndt 2000:92)
nanggayan *guny-bi-yarluga?*
who 2DU.A.3SG.P-FUT-poke
“Who do you two want to spear?”