# **FLAT**

FoLiA Linguistic Annotation Tool







## Introduction (1/2)

#### What is FLAT?

- FoLiA Linguistic Annotation Tool
- A web-based tool for linguistic annotation of language resources
- Many different annotation types
- Flat is anything but "flat", it deals with deeply nested data and retains document structure.
- Aims to be a fully-featured annotation environment for FoLiA documents (currently in an early beta stage!)

# Introduction (2/2)

#### What is FoLiA?

- Format for Linguistic Annotation
- An XML-based file format for storing and exchanging language resources
- Generic paradigm independent of language or label set
- Single format for all
- Implemented in many tools (ucto, frog, ucto, pynlpl, ticcl, folia-tools)
- Used in many projects (SoNaR500, Nederlab, DutchSemCor, Basilex, OpenSoNaR)
- Funded by CLARIN-NL

### **Notable Features**

- Modern web-based interface
- Multi-user environment
- Download and upload FoLiA XML documents
- Concurrency (multiple users may edit the same document similtaneously)
- Storage model with [git] versioning control (unlimited undo operations)
- Full annotator information: who annotated what and when?
- Layered, retains document structure
- Annotations may pertain to single tokens or span over multiple (span annotation)
- Support for corrections of either text or linguistic annotations.
   Corrections are never mere substitutes, originals are always preserved!
- Support for alternative annotations.
- Introduces FoLiA Query Language for automated and batch editing



## Visualisation of annotations on hover

#### Stemma Stemma is een ander woord voor stamboom. In de historische wetenschap wordt zo'n stamboom, onder de naam stemma verwantschap tussen handschriften weer te geven . Taken • WR-P-F-I-00000000001 p 1 s 1 w 7 • undefined Text stamboom Werkwijze undefined Part-of-Speech N(soort,ev,basis,zijd,stan) can-combinedtaas Hiervoor woooorden de handschriften Lemma voor het originele handschrift. De and waarvan men toch vermoedt dat ze oo Syntax haken geplaatst. voor stamboom Tenslotte gaat de verwantschap tusser Dependency obi1 voor stamboom volle lijn alpino-set duidt op een verwantschap , terwijl eer Chunk undefined voor stamboom chunk-set Eerste testitem timesegment utterance Tweede testitem voor stamboom avant-set Fen stamboom



#### Global visualisation of classes



#### Stemma

Stemma is een ander woord voor stamboom. In de historische verwantschap tussen handschriften weer te geven.

#### Werkwiize

Hiervoor wooorden <mark>de</mark> handschriften genummerd en gedate voor het <mark>originele</mark> handschrift <mark>. De andere</mark> handschriften krijg waarvan men toch vermoedt dat ze ooit bestaan hebben word haken geplaatst .

Tenslotte gaat de verwantschap tussen de mooie handschrift volle lijn duidt op een verwantschap , terwijl een stippellijn op een onz

## **Editor**





## In the field

## Currently used in two projects

- 1. A project with *College van Examens*: Spelling correction on texts of children and on automatic corrections by Valkuil.net .
- 2. A project concerning the annotation of named entities, specifically locations, in historical texts from World War II, with *Susan Evans*, *Marten Düring* and *Antal van den Bosch*

OPERATION MARKET GARDEN 18th Sept 1944 1100 hours Saltby Aerodrome Correction set: Emplaned on US Dakota aircraft for Arnhem, Some Gliders observed ditched in English Channel, Anti-aircraft https://raw.git..s/namedentitycorrection.. 

† 1400 hours Dropped on DZ (Ginkel Heath) Light anti-aircraft and machine gun fire as we dropped, DZ was be twisted leg on landing so I took over as No 1 Rendezvous was on edge of DZ which we both made. Legend • Named Entity 1500 hours Moved along railway line in direction of Arnhem then through Wolfheze. We were held up by en houses to try to take out enemy. Nick and I were on top of a garden wall and about to drop when enemy made great speed. We found it impossible to proceed via the rear of the houses as the Germans had it well covered Person short time but no enemy seen. Orders were given to withdraw back along railway line. We bedded down in w Miscellaneous the Bren Gun, Enemy were firing tracer bullets trying to attract our fire so they could find our positions. | lay Organisation pylon above v head. I was relieved after about 2 hours. And was glad to rejoin my comrades. Attempted to mortar bomb Location - Nature elements 19 Sept Text Location - Building In morning ad could identify Named Entity Product Relieve there separated from Correction: wrongclass with Sat Shep Original from our fron Named Entity: No sooner had Original Text: was. I received Original Text: think now for **Original Text:** was spotted as Original Text: realise now ho was brought in to speak as I did under normal conditions. I had every respect for the RSM. A morphine injection quietened m They tried to evacuate us on a Bren gun carrier but when we went up the track a warning was shouted that a retreated, the 88 shell just missed. We were later evacuated by jeep to the Schoonoord Hotel in Oosterbeek. hotel opposite. My stretcher was placed in a hall at the side of the hotel. The stretchers were so close that th biscuit, sweet and cup of tea. Every now and again the firing ceased outside. I believe this was the respect for fighting and had been wounded. They released him much to our joy. 10 October 1944

went up that with their m ah these wo eneral Hackel trying to cro Organisation and a burst f ast round. Th make my way ll flat on my i nded. I was u on an Airborn

dumped off

to the one opposite with operating theatre. An enemy tank put a shell through the roof of our hotel and late was a hospital. Eventually German troops filtered in and we realised the end was coming. An SS Sergeant Major came in and passed round German cigarettes while smoking British from our supply dr saying it was the fault of the Jews that we were fighting. The Dutchman, Steve, I think his name was - agreed been acting as a guide for us, he was also a Jew and a very brave one too. The Medics eventually convinced to

In the final stages of the battle we were transported in German Army ambulances to the King William III Barr earliest paras moved were taken by cattle trains but I was one of the lucky ones and was taken by ambulance Germans were unloading tanks from trains in the sidings. I presume we were left there to deter the RAF or Ya train and I remember the old German Matron in charge ruled the German Medics with a rod of iron but was k

Arrived at Fallingbostel railway station and treatment of us changed. Transport was provided only for those hopped from the railway station to Stalag XIb which was to be our new home for the duration. I was able to r station left me so weak and I could not leave my bunk for several days. I was unable to queue up to collect m

> **CLST | Centre for Language and** Speech Technology Radboud University

#### Demo

Demo: http://flat.science.ru.nl

• Source: https://github.com/proycon/flat

• FoLiA website: http://proycon.github.io/folia

