# CLARIN Workshop Multilingual corpus annotation tools: development and integration

#### INTRODUCTION

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CLARIN workshop, Jožef Stefan Institute Ljubljana, 10th–11th November 2016



### Overview

Introduction

2 Standards, Resources, Tools

Overview of the Workshop

## Introduction

## Reasons for the proposal

- CLARIN.SI: working repository & concordancer
- Logical next step: corpus annotation for linguists → on-line workflows
  - we developed open & language independent annotation tools (ReLDI & Janes)
  - CLARIN-D WebLicht
  - JSI ClowdFlows and TextFlows
- So, why not have a workshop?
- Proposers: CLARIN.SI + CLARIN-DE, CLARIN Latvia

# CLARIN Type II workshop

- The WS should result in a development plan max. 2 months after the WS: January 2017!
- The proposed development should address humanities & social sciences users
- Development:
  - max. 6 months duration
  - 3 PM (secondment) + travel costs
- Not necessary for all the WS participants to participate in the development

## The time is right

- 60's meets EU: Open Source and Open Access
- Maturity of tools and resources:
   "little" effort needed to open & operationalise them
- Issues:
  - Maturity of platforms:
     ease of use, bugs & crashes
  - Scalability of solutions:
     data transfer overhead & hardware base
  - How many tools and resources are in fact openly available
  - Disparate standards in formats and linguistics formalisms

# Standards, Resources, Tools

#### Standards

- Current situation:
  - Resource encoding: TEI, TCF, FoLiA, ...
  - Metadata encoding: DC, CMDI, TEI, ...
  - Tool outputs: tabular, TCF, Python objects, ...
  - Formalisms:
    - PoS tagsets: MULTEXT-East, STTS, UD, ...
    - Similarly for tokenisation, NER, syntactic annotation, ...
- Ideal outcomes (for me):
  - TEI + TCF (prior work in WebLicht)
  - UD + MULTEXT-East (prior work with STTS)

#### Resources

- Problems:
  - Different standards
  - Problems with finding and accessing
  - Copyright, Privacy protection, Terms-of-Use
- Training corpora (& lexicons):
  - Slovene OK
  - Availability of others?
- Testing and use corpora:
  - EU DGT
  - UD treebank
  - Historical data
  - On-demand creation (TweetCat + TweetGeo, Web crawl)

### Tools

- Standards (formats & formalisms)
- Availability (licence, open source?)
- Exposing as web service
- Language independence
- Scalability (speed, max size of resource)

#### Possible use case: Twitter

- Provide sample datasets for Twitter data for a selection of languages of workshop participants (could use TweetCat / TweetGeo)
- Integrate a preprocessing toolchain for Twitter data for these languages
  - Non-standard tokenisation and sentence splitting
  - Normalisation
  - PoS-tagging and lemmatisation
  - Syntactic parsing
- Enable mounting the preprocessed data to a concordancer
- Undertake a common study and present at CLARIN 2017

## User Perspective: WebLicht Tutorial

- Introduction on how to use the developed services
- Aimed at humanities scholars
- Localized into the national languages of workshop participants
  - https://dhregensburg.files.wordpress.com/2015/07/ weblicht-tutorial.pdf
  - https://www.youtube.com/watch?v=3RgRCEa6Smo

# Overview of the Workshop

## **Participants**

- Jožef Stefan Institute:
  - CLARIN.SI: Tomaž Erjavec, Darja Fišer
  - ReLDI+Janes tools: Nikola Ljubešić
  - TextFlows: Senja Pollak, Matej Martinc
  - With special thanks to Tina Anžič for organisation
- CLARIN-DE / WebLicht:
   Erhard Hinrichs, Marie Hinrichs, Wei Qiu
- CLARIN Latvia: Inguna Skadina, Roberts Dargis, Lauma Pretkalnina
- CLARIN Estonia: Krista Liin
- LINDAT/Lindat: Pavel Stranak (Friday only)
- CLARIN-IT: Riccardo Del Gratta (Friday only)



#### WS Schedule

- On the Web
- Intro to WebLicht & TextFlows
- Overview of tools and resources (today and tomorrow)
- Today: Discussion
- Tomorrow: Hackaton & drafting the workplan

#### Practical matters

- OK to put presentations on the Web?
- Lunches at the JSI cafeteria
- Dinner at Špajza

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