COST Action CA21167: "Universality, diversity and idiosyncrasy in language technology" WG3 Meeting 2023-03-17 Minutes

Session 1

10.45–11.00 Introduction to WG3 (slides)

11.00–11.30 Brainstorming on ideas and expectations

Discussion questions:

- What is most important for you in multilingual and cross-lingual NLP?
- What activities do you think we should prioritize?
- How can we work together to make progress towards our goals?

Points raised:

- Large language models are most important
- · Articulating linguistic theories underlying tools
- Defining idiosyncrasy and diversity
- The user perspective is important
- Supporting low-resource languages through cross-lingual technology
- Supporting low-resource languages through annotation tools
- Supporting low-resource languages through data collection
- Supporting low-resource languages with semantics
- Tools for all languages start with morphology
- Low-resource language is not a homogeneous concept
- Building resources for specific languages (Serbian)
- Linking corpus resources between languages
- Standardized tools applicable to different languages
- Evaluation of tools coordinate with other WGs
- Tracking evaluation status for different types of tools
- Improved benchmarking and experimental design
- Organize shared tasks

11.30–12.00 Initial discussion on documentation of tools

Discussion questions:

- Which types of tools do we want to include?
- Where do we want to keep the documentation?
- How do we create this documentation/inventory?

Points raised:

- A huge multidimensional matrix
- A shared repository
- Tools shared between typologically similar languages
- Consider end users
- Too many languages have nothing document what is missing rather than what exists

- Connect to CLARIN
- Flagship project on MWE
- Include all tools or be selective?
- What about commercial tools?
- What about tools without documentation?

WG tasks emerging from the discussion:

- Define multidimensional taxonomy of tools for documentation
- Define infrastructure and procedure for creating documentation

Session 2

13.30–13.35 Recap of Session 1 (for new participants)

13.35–14.20 Initial discussion on evaluation campaigns

Background on goals and previous shared tasks (slides)

Brainstorming – define a novel shared task/evaluation campaign:

- How is the task defined?
- What are the evaluation metrics?
- What kind of data is needed?
- Which languages should be included?

Ideas:

- Task = provide resources for shared tasks (eval metrics, test sets)
- Instead of a shared task, build a dynamic leaderboard for LMs
- Compare "traditional methods" to LMs on UD and MWE data
- UD parsing with only surprise test languages, minimize training data
- NLP tasks on top of UD data using linguistically defined embeddings
- Distinguish similar languages or dialects (for example, using MWEs)
- Objective: make every language appear at the center of the world
- Collect idiom data using LLMs, evaluate on gold data

14.20-14.30 Next steps

Next WG3 meeting in Istanbul, September 8, 2023

We will focus on documentation of tools

Two tasks in preparation for the meeting:

- 1. A taxonomy of multi- and cross-lingual language technology
- 2. An infrastructure for multi- and cross-lingual language technology Volunteers for these tasks are encouraged to contact WG leaders by email

14.30–14.45 Presentation of the European Language Equality project (slides)