



Multilingual and Cross-Lingual Language Technology

Coordinating the development of tools leveraging universality and promoting diversity

# Tools leveraging Universality and promoting Diversity (TUD)

What do we understand by a TUD ?

- a TUD may not be simply defined as a tool working on multiple languages due to common data formats.
- a TUD may not be defined as a language-independent tool.
- a TUD is a tool which could work efficiently on multiple languages taking into consideration their diversities.

### Example from Dependency Parsing

- Early dependency parsers were multilingual and language independent due to the common CoNLL format.
- However they were not working well on morphologically rich languages (MRLs) due to their approach on using the morphological features as a block.

sağlamlaştırdığımızdaki - "(the thing existing) at the time we caused (something) to become strong"

VERB Aspect=Perf|Case=Loc|Number=Sing|Number[psor]=Plur|Person=3|Person[psor]=1|Polarity=Pos|Tense=Past|VerbForm=Part + ADP Rel

 MaltParser as a TUD added special treatments for MRLs placing it to the top rank in CoNLL 2006 shared task both for MRLs and others.

### possible focus TUDs

- Dependency Parsers (also the topic of the first planned WG3 shared task) !Unidive Members
- Verbal MWE identifiers
- Semantic parsers (e.g., AMR, UMR parsers)
- Multilingual coreference resolution systems
- Multilingual idiomaticity detectors
- . . . .

As the WG3 community, we have many members experienced in many of these tasks.

Our group consists of organizers of previous shared tasks on some of these technologies.

We may form sub-groups around these for initiating new collaborations around TUDs.

Members experienced on semantic parsing and other topics, Please introduce yourself by sending email to WG3 co-leaders.

## Discussion: How do we organize ourselves to achieve this?

#### **Initial Networking Idea:**

organizing Hackathon like activities?

- Creating sub interest groups around different topics?
  - Collecting Hackathon task proposals around different topics
  - Call applicants for each sub-group
- Organize a physical event or online event for group work? what else?

#### Reminder:

- COST action only funds the networking activities
- Some Cost member countries have special funding programmes for COST related research projects.