3rd International Conference on Computer Processing in Turkic Languages (TURKLANG 2015)

Towards a free/open-source universal-dependency treebank for Kazakh

Francis M. Tyers^a and Jonathan Washington^b

a HSL-fakultehta, UiT Norgga árktalaš universitehta, N-9015 Tromsø, Norway
b Departments of Linguistics and Central Eurasian Studies, Indiana University, Bloomington, IN 47405, USA

Abstract

This article describes the first steps towards a free/open-source dependency treebank for Kazakh based on universal dependency (UD) annotation standards. The treebank is based on texts from a range of open-source and public domain sources ensuring its free availability and extensibility.

Keywords: Kazakh; treebank; dependency grammar; universal dependency

1 Introduction

?, ?, ?, ?

2 Background

- 2.1 Kazakh
- 2.2 Treebanks
- 3 Methodology
- 3.1 Corpus
- 3.2 Preprocessing

?

Document	Description	Sentences	Tokens	Avg. length
UN Declaration on Human Rights	Legal text on human rights	25	409	16.3
Phrasebook	Phrases from Wikitravel	37	205	5.5
Жиырма Бесінші Сөз	Philosophical text	34	525	15.4
Өлген қазан	Folk tale	8	140	17.5
Ер Төстік	Folk tale	23	203	8.8
Азамат қайда?	Story for language learners	48	434	9.0
Футболдан элем чемпионаты 2014	Wikipedia article (2014 World Cup)	14	246	17.5
Иран	Wikipedia article (Iran)	111	1562	14.0
Радиан	Wikipedia article (Radian)	2	17	8.5
		302	3741	12.38

Table 1: Composition of the corpus. The corpus covers a range of genres and text types from free and public-domain sources.

Table 2: Universal dependency label set

4 Annotation guidelines

- 4.1 Copula
- 4.2 Coordination
- 4.3 Complex nominals
- 4.4 Non-finite clauses
- 5 Evaluation
- 6 Future work
- 7 Conclusions

Acknowledgements