# Afrikaans



Juri Ganitkevitch & Jonny Weese

# Demographics & History

- ~6 million native speakers in South Africa
  & Namibia
- ~20 million speakers total
- Second-most prevalent language in South-African media
- Originated in 17th century Dutch

# Linguistics

- West Germanic language family
- Closely related to Dutch: mutually intelligible
  - Orthographic simplifications
  - No gender, simple verb morphology
  - Influences from Malay, Portuguese, African languages, and South African English

# Examples

Dutch	Afrikaans
ik <u>ben</u> , u <u>bent</u> , het <u>is</u> ,	ek <u>is</u> , u <u>is</u> , dit <u>is</u> ,
lk wiel dit <u>niet</u> doen.	Ek wil dit <u>nie</u> done <u>nie</u> .
provin <u>cie</u> , poli <u>tie</u> ,	provin <u>sie</u> , poli <u>sie</u> ,

## Afrikaans in MT

#### **Dutch-Afrikaans**

 Rule-based text transformation: morphology, orthography, compounds ('09, '11)

#### Afrikaans-English

- Phrase-based SMT: small parliamentary parallel corpora ('05)
- Google Translate: web data & probably rulebased repurposing of Dutch data ('09)

## Af-En Parallel Data

URI

# words



autshumato.sf.net

~439k



opus.lingfil.uu.se

~700k



af.wikipedia.org ~21k articles

### References

- 1. Wikipedia, 2012
- Rapid rule-based machine translation between Dutch and Afrikaans.
  P. Otte & F. Tyers, 2011
- 3. Processing Parallel Text Corpora for Three South African Language Pairs in the Autshumato Project. H. J. Groenewald & L. du Ploy, 2010
- 4. Rule-based Conversion of Closely-related Languages: A Dutch-to-Afrikaans Convertor. G. van Huyssteen & S. Pilon, 2009
- 5. Rapid Development of an Afrikaans-English Speech-to-Speech Translator, H. Engelbrecht & T. Schultz, 2005
- 6. The OPUS corpus parallel & free. J. Tiedemann & L. Nygaard, 2004

## Dankie.

## Language Presentations

- Teams of two
- Pick a language and a date
- Email us: juri@cs.jhu.edu
- First come, first served
- Due: 11:59pm on Sunday, 2/12