

Morphology Exercise

October 9, 2008

1 Automata

- 1 Build a Non-deterministic Finite State Automaton that can recognise all present and past forms of the German root *dehn* (slide 20). The automaton should allow for all forms in the paradigm, and no other forms.
- 2 Following the rules presented in the second part of the lecture (slides 49-54), draw the corresponding Deterministic Finite State Automaton. Make sure to show intermediate steps.

2 Morphological Analysis

- 1 Consider the following words (Yup'ik) (Reed et al. 1977):

<i>patu</i>	'lid'		<i>patungqerr</i>	'to have a lid'
<i>qayar</i>	'kayak'		<i>qayangqerr</i>	'to have a kayak'
<i>irniar</i>	'child'		<i>irniangqerr</i>	'to have children'
<i>enr</i>	'bone'		<i>enengqerr</i>	'to have a bone'

- What morphemes can you distinguish in these examples?
- Is this an example of derivational or inflectional morphology?
- Which morphological process occurs when morphemes are combined?

- 2 Consider the following (Finnish) examples:

- (1) a. puhun Suomea.
'I speak Finnish.'
- b. puhut Suomea.
'you speak Finnish.'
- c. hän puhuu Suomea.
'he/she speaks Finnish.'

- (2) a. puhumme Suomea.
'we speak Finnish.'
- b. puhutte Suomea.
'you (all) speak Finnish.'
- c. he puhuvat Suomea.
'they speak Finnish.'

- What morphemes can you distinguish, next to Suome-a → Finnish-PARTATIVE?
- What is the level of exponence of these morphemes?

Consider the following additional example:

- (3) syön ja syötte ja he syövät
'I eat and you (all) eat and they eat'.

- Is the morphology for the verb 'eat' the same as for 'speak'?
- What process causes the difference between allomorphs?

3 Bibliography

- Payne, Thomas. 1997. *Describing morphosyntax*. Cambridge University Press, UK.
- Reed, Irene, Osahito Miyaoka, Steven Jacobson, Paschal Afcan, and Michael Krauss. 1977. *Yup'ik Eskimo Grammar*. Fairbanks: Alaska Native Language Center and Yup'ik Language Workshop, University of Alaska.