Morphology Exercise

September 30, 2009

1   Automata

1 Build a Non-deterministic Finite State Automaton that can recognise all present and past forms of the German root *dehn* (slide 17, Part 1). 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 40-42), 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):

patu	'lid'	*patungqerr*	'to have a lid'
qayar	'kayak'	*qayangqerr*	'to have a kayak'
irniar	'child'	*irniangqerr*	'to have children'
enr	'bone'	*enengqerr*	'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, apart from 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.