

# Morphology

Einführung in die Computerlinguistik – Übung 11.12.2015

# Write

1. Open console (Use MobaXterm on Windows)

2. Only if you are on your private computer

```
ssh username@remote.cip.ifi.lmu.de
```

3. Login to my machine

```
ssh tbd
```

4. Enable chat

```
msg y
```

5. Send answers or questions

```
echo "bla bla" | write kannk
```

# Morphology - SMOR

SMOR is a finite-state machine for morphological analysis and generation of words.

1. Download “SMOR” from the course page.
2. Go to the folder and unpack the archive (“tar xfvz SMOR-linux.tar.gz”).

```
tar xfvz SMOR-linux.tar.gz
```

3. Have a look at the tag description at <http://www.cis.uni-muenchen.de/~schmid/tools/SMOR/dspin/ch01s03.html#id558692>

# Morphology – SMOR

4. Look at the README file in order to answer the following questions:
  1. How can you start SMOR?
  2. How can you analyze a word?
  3. How to switch between modes to analyze and to generate words?
  4. How to generate words?
  
5. Go to the German Wikipedia and analyze the first 10 words of a random article. Which information does SMOR give about...
  1. ...nouns?
  2. ...verbs?
  3. ...adjectives/adverbs?
  4. ...prepositions?
  5. ...conjunctions?

# Morphology – Analysis of Words

6. Analyze the word “schöner” and explain all possible analysis.
7. Find a word SMOR does not know.
8. Competition: Find a word that is not a compound with as many analysis as possible!
9. Competition 2: Find a compound with as many analysis as possible!

# Morphology – Generation of Words

INFO: How to generate word forms?

- change to generation mode
- enter the basic form of a word + the tags you want
- the basic form is the form you get when analyzing
- you can find all tags in the description file (cheat: analyze a word that has the tags you want and copy them ;) )

# Morphology – Generation of Words

10. Analyze the following words and generate their plural form:

- Buch
- Tisches
- Bauer
- Mädchens

11. Analyze the following words and generate the Singular form (same person):

- esst
- lesen

# Morphology – Generation of Words

12. Generate the 4 singular forms of “Glaube”.
13. Generate the 4 plural forms of “Haupt”.
14. Generate all 3<sup>rd</sup> person singular forms of “flanieren” that consist of one single word.
15. Try to generate a word that does not exist in German, for example words without a plural form. What does SMOR do?



# Morphology – Generation of Words

Change of part of speech:

15. Generate a noun from a verb.

16. Generate an adjective from a verb.

17. Generate a noun from an adjective.