MANUAL

Open the template. The template has 3 sheets.

Sheet 1 is called ***data***. The general layout of this sheet is very similar to the handout *Maximum network* and you will fill in here the data which you prepared for the *Maximum network*. Do not panic, if your *Maximum networks* have been already completed – just use the copy-and-paste function and transfer the data. The sheet is designed for 5 orders of derivation (each of them is marked in yellow) and a maximum of 50 semantic categories.

Some areas of the sheet are greyed. These areas are open for you. The rest of the sheet is locked. Thus, you cannot write anything there, you cannot change the content of the cells. To sum it up, **your task is to complete the grey areas** (and cells). In the template, some grey cells are filled in. These are the examples from the Bulgarian language. Delete the Bulgarian data in column D as soon as you start feeding the template with your own data.

Start the completion of the sheet with tags in the left-hand side upper corner. There are two tags: *language* and *word class*. Complete the respective information (e.g. *Bulgarian* and *adjectives*). Complete the column A lines 5-14 by your sample words. In the case of adjectives, complete the lines by adjectives from your language in the order as they are given in the template (replace the English adjectives by adjectives from your language). In the case of nouns and verbs, follow this order:

bone	*cut*
eye	*dig*
tooth	*pull*
day	*throw*
dog	*give*
louse	*hold*
fire	*sew*
stone	*burn*
water	*drink*
name	*know*

Please, do not change the order of the words. It is very important for the cross-linguistic comparison. As soon as you fill in the words in the 1st order of derivation, they will be automatically copied to the other orders.

Lines 4, 20, 36, 52, and 68 should be completed by semantic categories that occur in your sample. The choice of their order is up to you but be consistent – follow the same order of the semantic categories for each line (cf. also the handout *Maximum network*. The order of semantic categories must be the same for each order of derivation). The example introduced into the template is STATE. You can, of course, delete it and start with a different semantic category.

Now you can feed the sheet with your data for individual words. In each order of derivation, you can observe the following lines:

Maximum in columns (in the 1st order of derivation it is the cell C16): as you feed the greyed area (i.e. number of derivatives in the given semantic category derived from the base word), the template automatically identifies the highest numeral in the column. Thus, it identifies the numbers which are needed for the identification of the maximum derivational network value.

Count in column (in the 1st order of derivation it is the cell C17): as you feed the greyed area (i.e. number of derivatives in the given semantic category derived from the base word), the template automatically identifies the number of completed cells. Thus, it answers the following question: How many bases derive a word in the respective semantic category? This number should help you to answer the question of **typicality** (cf. the materials from our workshop) – the highest the number the more typical the semantic category and vice versa.

Sum MAX in column (in the 1st order of derivation it is the cell A16): as you feed the greyed area (i.e. number of derivatives in the given semantic category derived from the base word), the template automatically identifies the sum of *maximum in columns*. Thus, it identifies the maximum derivational value needed for the calculation of the saturation value (cf. STEP 1 in the Calculation of the Maximum Derivational Networks and Saturation Values handout)

Sheet 2 is called ***calculations*. This sheet is fed by data from the *Data* sheet.** It means that if there aren't any data in the *Data* sheet, you can see the following symbols: ###in the *Calculations* sheet. **You are not supposed to feed this sheet with** data but you are asked to use the calculations in your chapter. The sheet has the following sections:

Count: it automatically calculates the number of derivatives for individual base words. Thus, it answers the questions as, for example: *How many derivatives hare there from the adjective warm in the 1st order of derivation? What is the total number of derivatives of the adjective warm?* In line A15 it gives the highest number of derivatives identified in the respective order of derivation (*Which word derived the highest number of derivatives? What is the highest number of derivatives in the 1st order (2nd etc.) order of derivation?*)

Max: it summarizes the highest number of derivatives in individual orders of derivation (cf. *Maximum network* handout, numbers in yellow and red; STEP 1 in the Calculation of the Maximum Derivational Networks and Saturation Values handout).

Order: this section of the sheet corresponds with Table 1 in STEP 2 in the Calculation of the Maximum Derivational Networks and Saturation Values handout. It calculates the maximum derivational network value for individual orders of derivation.

STEP 3: the name of the section refers to STEP 3 in the Calculation of the Maximum Derivational Networks and Saturation Values handout. It determines the maximum derivational network.

Saturation: In this section saturation values are automatically calculated. You can find here the saturation value of individual base words in individual orders of derivations (cells O4-S14) – these values correspond with STEP 5, Table 3 in the Calculation of the Maximum Derivational Networks and Saturation Values handout. The Total column gives the saturation of the individual words in the whole network. It corresponds with STEP 4 in the Calculation of the Maximum Derivational Networks and Saturation Values handout.

STEP 6: calculates the saturation value as specified in STEP 6 in the Calculation of the Maximum Derivational Networks and Saturation Values handout.

Correlation: this last section answers the question raised by Livio Gaeta during the workshop: Is there a correlation between the saturation values and paradigmatic strength? The question is about the association between the number of derivatives in the 1st order of derivation and the saturation value in individual orders of derivation. The correlation is expressed by a value in the range from 1 to -1. Value 1 suggests direct correlation (direct proportionality) – higher saturation value correlates with higher paradigmatic strength. Value 0 means no correlation. A value between 1 and 0 implies a certain tendency. -1 value means inverse relationship (indirect proportionality) – a higher saturation value correlates with a lower paradigmatic strength. If you prefer visualizations, you can use charts which are automatically designed in **Sheet 3 *Graphs*.** Interpret them with regard to direct and indirect proportionality.

Summary: the template **calculates** the saturation values, identifies the **correlation** between the saturation values and paradigmatic strength, and helps you to answer the question of **typicality** (for all these points cf. the workshop materials). Your task is to feed it with data (sheet *Data*) and comment on the results obtained in sheets *Calculations* and *Graphs*.

Final note: the template was tested on an excel-resistant individual (Pavol) who realized its advantages as soon as he noticed the number of miscalculations in the handouts which were distributed among workshop participants and which are on the Monika website. We apologize for the mistakes in the handouts and encourage all excel-and-statistic repellents to discover the user-friendly nature of the template. Shall you have any questions, please get in touch!