

# FLEx Session– Grammar Templates–Nouns

## Objectives

- To be able to configure grammar templates for basic nouns.
- To be able to populate noun grammar templates from affixes already in the lexicon.
- To be able to assign new affixes to the noun grammar template as they are being entering into the lexicon.

## Why?

Up until now all of the parsing we have done has been “manual” parsing, which is to say we clicked on the word forms and added spaces, hyphens, asterisk and so forth to divide the words ourselves unaided by the parser in FLEx. (If FLEx parsed a word for you, it was because it had already been parsed before and FLEx used that same analysis.) We have been laying the ground work for FLEx’s morphological parser, but we lack one more piece—the grammar template. It is the grammar template that controls the order and collocates of the morphemes. They define the “slots” that the morphemes may or may not go into and whether a particular slot is obligatory or optional. They prohibit the morphemes of one word category from attaching themselves to the stems of other word categories. The lexicon has the stems, roots and affixes defined, but without the grammar template to apply order to them the automated morphological parser will not be able to correctly parse words very well.

## Defining Noun Grammar Template

The Nyangatom noun is actually more complex than we have seen so far, but we will begin by defining a grammar template that describes the simple nouns we have seen so far. Templates can always be edited later as your understanding of the language grows. Templates are in the Grammar section of FLEx. Start FLEx and open **Nyangatom** project.

### How to add a grammar template

1. Leave Lexicon Edit view and go to the Grammar view by clicking on the Grammar tab on the lower left. Click on **Category Edit** which is the first item in the list on the upper right.
2. Click on **Noun** in the second column.
3. Click in the white space in the **Affix Template** area. The **Insert Affix Template** link will become visible, click on it. In the **Template Name** field enter “**Basic Noun**”. In the Description field enter “**The structure of the most basic nouns in Nyangatom**”.



4. Right click on the word **STEM** which is in the **Table** field. A drop down menu will appear; choose **Insert slot before STEM**.
5. The **Choose Slot** window will appear. There will be no pre-existing slots to choose from so click on the **Add obligatory slot to Noun** link. A grammar template for nouns will be created. The new prefix slot will be highlighted saying “**Type slot name here**”. Type in the name **np<sub>x</sub>**.
6. Now that you have created a grammar template for basic nouns, you need to specify which morphemes may occur in the **np<sub>x</sub>** slot. Right click on **np<sub>x</sub>**. Choose **Add inflectional affix(es) to np<sub>x</sub>**.
7. The **Choose Inflectional Affixes** window will appear; choose the prefix **e-**; then click on the **OK** button.
8. Right click on **Template Name**, and click on **Delete Affix Template**.

### Exercise

1. Have the participants add an affix template for basic nouns, and specify that the prefix **e-** can occur in the **np<sub>x</sub>** slot following the steps above.
2. Have the participants go to the lexical entry for **ikoku**, then return to the Grammar template area and add **i-** and **ngi-** to the list of morphemes that can occur in the **np<sub>x</sub>** slot.

### Adding Affixes that can occur in a slot from Lexical Edit view

Once an Affix Template has been defined, then affixes can be assigned to their slots from Lexical Edit view. As with most things in FLEx there is more than one way to populate templates with affixes. This method is good for one or two affixes that got overlooked somehow. It is too slow for adding large numbers of affixes to templates.

#### How to add an affix to a template from to the lexicon

1. Go to the Lexicon Edit view. Navigate to the entry for the prefix **a-**.
2. In the **Grammatical Info** field click on the drop down arrow, and choose **Modify this Grammatical info**. The **Edit Grammatical Info** window will open.
3. Click on the drop down arrow in the **Fills Slot** field. Choose **np<sub>x</sub>**, then click on the **OK** button. Notice that the Grammar Info field now says: **n:np<sub>x</sub>**.
4. Navigate to the **Affix Template** section of the Grammar view and verify that the prefix **a-** is now listed as a member of the **slot np<sub>x</sub>**.

### Exercise

1. Have the participants navigate to the lexical entry for the prefix **nga-** and assign it to the **slot np<sub>x</sub>**. Then navigate to the **Affix Template** section of the Grammar view and verify that the prefix **nga-** is now listed as a member of the **slot np<sub>x</sub>**.