

ViCoS tutorial, summerschool

This tutorial will take you through the first steps of creating a new conceptual space in ViCoS. After the tutorial you will be able to:

- Open you lexicon in ViCoS
- Create links between entries
- Add external links
- Create relation types

ViCoS can be opened from your LEXUS workspace, if you are no longer logged in to LEXUS, login through <http://corpus1.mpi.nl/lexusDojo> and use the same username and password as in the LEXUS tutorial

1. Getting into ViCoS workspace and finding entries.

Switch from the LEXUS workspace to ViCoS (its in the main menu).

In ViCoS, select the 'lexicon for Vicos'. By default ViCoS selects the 'lexeme' data category to display the entries in the ViCoS word list.

The word list in ViCoS shows all the entries in the lexicon. By clicking one of the characters of your LEXUS sort order displayed in the ViCoS screen, ViCoS will only display a selection of your entries.

ViCoS also offers a search. You can fill a search term in the box, and select one of the options: 'begins with', 'contains' or 'ends with' by selecting the correct circle behind the search box.

Select the entry 'animal' in the word list. A tab will be opened in the main screen. The entry will be displayed in this tab according to the "Word list view" that is defined in LEXUS (in this case it shows the lexeme and the part of speech value).

Open a tab for all the entries in your lexicon.

2. Creating relations between entries

Create an 'is-a' relations between 'fish' and 'animal'. Use the source and target frames. Remember to save any changes.

You can also create multiple links at the same time by dragging more than one entry into the frame. The entries can be dragged by any part of the table (Lexical entry, word) but it is important to be aware by which part are you dragging them, as the relation will be created for that part of the entry.

Create another 'is-a' relation between 'insect' and 'animal' and one between 'mammal' and 'animal'. Create further relations of the 'is-a-kind-of' relation types between the concepts in your lexicon.

Open a knowledge space through the 'animal' concept (drag the concept into the 'Show in knowledge space' frame. View the relations you have created. Select the browse option, and browse through your conceptual space.

3. Creating relation types

Open the RT manager in ViCoS and create the relation types: 'eats' and 'lives in'.

4. Creating relations in the conceptual space.

Add the concept 'water' to the conceptual space of 'fish'. Create an 'lives in' relation between 'water' and 'fish', 'salmon' and 'shark'. Notice that you can see more than one level of relations now, but when you browse back to a different center node, you will only see one level.

Likewise create an 'eats' relation between 'fish' and 'fly'.

5. Adding external links

Open the conceptual space and add links Wikipedia links to the entries, using the attach mode. View the results using the world mode.

6. Extra's

- If you have time add a blue color to the 'insect' node and a green color to the 'fish' node.

ViCoS Visualizing Conceptual Spaces

ViCoS is a web-based tool for the creation of conceptual spaces.

Requirements:

- A web browser with Javascript-enabled
- LEXUS registration. See LEXUS A4guide
- One or more LEXUS lexica

1. Start ViCoS

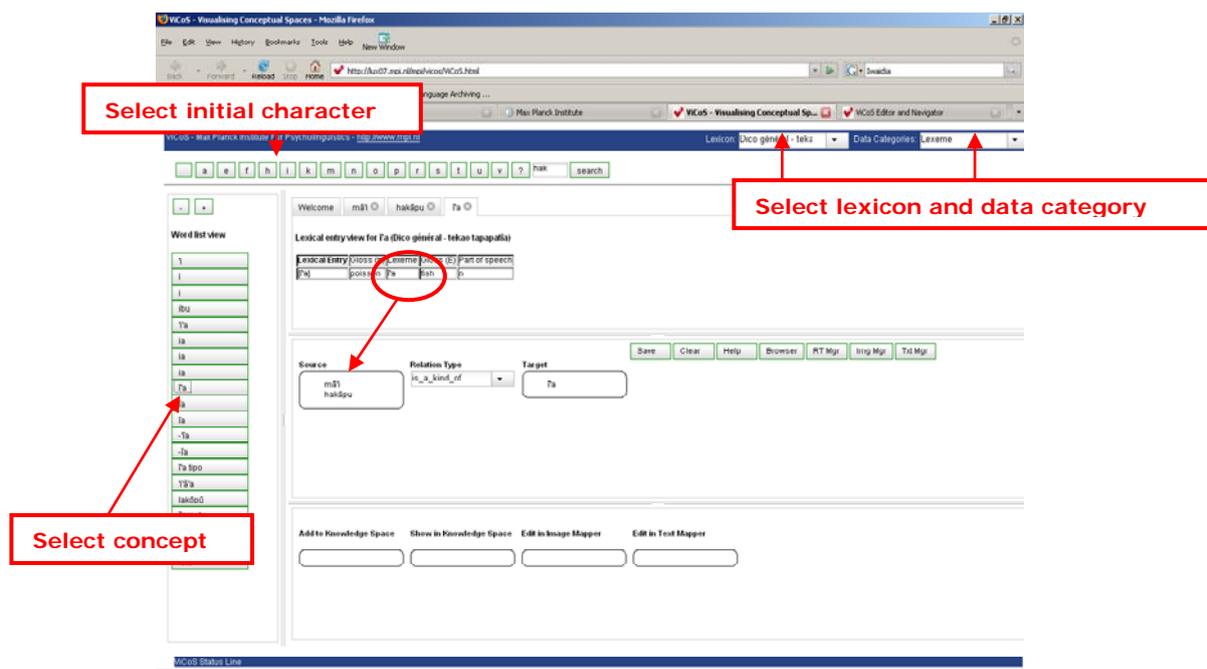
Before you can create a conceptual space, you need a lexicon. Create one or more lexica using LEXUS. To start the ViCoS application:

- login at <http://corpus1.mpi.nl/mpi/lexusDojo>
- from the LEXUS workspace, select the **Switch to** and **ViCoS** option in the top menu LEXUS

2. Create a conceptual space within one lexicon, using the source-target menu

- See Figure 1
- In the ViCoS menu (top of page), select the lexicon.
- The default data category for the ViCoS word list is 'lexeme'. If your lexicon structure has another name to refer to the head word, select this name from the drop down list in the 'data categories' field.
- Select the concepts that you wish to connect, by either:
 - use the search field; all entries matching your query will appear in the word list view (left); then select a concept from the word list. A tab containing some basic information of the concept appears in the main frame, or
 - select the initial character of the concept; the wordlist will show all lexical entries starting with the specified character. Click on the concept in the wordlist. A tab containing some basic information on the concept appears in the main frame
- To create a relation between concepts, drag the concept from the opened tab into the target or source frame and relate the two items by specifying a relation type. *Click Save to save the relation.*

Figure 1: creating a conceptual space using the source-target menu



3. Viewing a conceptual space

After you have created several relations, to view the resulting conceptual space

- In the ViCoS menu, open a concept tab as described above
- Drag the concept (or a data category element of the concept) into 'Show in knowledge space'
- This will open a new window (the ViCoS editor and navigator); the concept is central in the window and all *direct* relations from the concept to other concepts are shown

4. Mode options in the ViCoS editor and navigator

To activate one of the modes, click on the mode you want to use (selection is shown in green)

- **Browse:** Press the mouse on a concept node will show additional information about the node.
- **Move:** In this mode, you may move a concept node to a different XY position.
- **Connect:** Use this mode to connect two concept nodes; then choose the relation type from the 'Relation Type' drop down list (this is an alternative way to create relations between concepts).
- **Delete:** Clicking a relation arrow or concept node will remove the relation or node from the conceptual space. This can be undone in the **Refetch** mode.
- **Lexus:** Clicking a node will open the lexical entry in the LEXUS application.
- **Attach:** Clicking on a node will open a pop-up menu where an URL can be entered and attached to the given node (only one URL can be attached). **Detach:** Clicking on a node will remove any attached URL.
- **World:** When an external url is connected to the concept node, this is shown by a dark circle around the node. Clicking the node will open the url in a new window
- **Overview:** Gives an overview of all the relations between all concepts that originate in the selected lexicon.

Make sure you save any changes in move, delete and connect mode.

In **Browse**, **Move** and **Connect** mode, a double-click on a concept node selects this concept for center stage.

5. Relation types

ViCoS offers a set of default relation types, the so called 'universal relations', but ViCoS also allows users to create lexicon specific relation types, this is done in the Relation Type Manager (RT Mgr).

- See Figure 2
- open the RT Mgr by clicking on the RT Mgr icon in the ViCoS menu
- select the lexicon from the drop down list
- click 'New Relation Type' in the left frame
- Specify a name for the new relation and give a description (with possibly an example)
- Define if the relation is a functional relation, symmetric or transitive
- Specify line type and color
- Click on 'define'.
- The new relation can now be used to create relations between two concepts.

Figure 2: Relation Type Manager: creating a new relation type

