Part V: Relations

There are two types of relations in ATLAS.ti: code-to-code and hyper-links. Code-code relations can only be applied to nodes linking codes to codes. Hyper-links, however, have an entirely different set of relations, which can link quotations to quotations.

By default, there are 6 defined code-code relations and 8 defined hyper-link relations. Each set of relations also has an option for a user-defined relation, which will be explored further later in this tutorial. While some attributes of a relation impact how links are displayed in a network view, others can affect queries.

It is useful to understand the role that relations play in the construction of a theory. The concepts (codes) that are linked using relations represent aspects of the problem domain under investigation. On the other hand, the relations used to link these domain concepts are part of the methodology used to analyze the phenomena.

| Transitive   | Code-code relations: is-part-of; is-cause-of; is-a  
| Hyperlink relation: contradicts, discusses, expands, explains, justifies, supports |
| Symmetric    | Code-code relations: is-associated-with; contradicts  
| Asymmetric   | Code-code relation: is-property-of  
| Hyperlink relation: continued by, is a critique |

These relations can be searched using the semantic retrieval discussed in the section on queries.

Creating Code-Code Relations

1. Select one node by clicking on it. It will appear dark when selected.

2. Go to the Links menu; select Link Nodes.

3. A line will now appear from the selected node. It is like a rubber band, which can be stretched to another node. Once your rubber band is over the node you would like to link it to, single-click that node.
4. A relation menu will appear; select the relation you would like to use to define the relationship between the nodes.

5. Notice the top line of the relation menu, pictured right. ATLAS.ti is telling you what it is doing.

Note:

If a relation was being created between two quotations, a different context menu would appear to create the relation.

6. Once you select a relation, the name will appear as a label between the two nodes.

Creating Hyper Links (Hypertext)

Although hyperlinks can be created in much the same way as a code-code relationship, they can be somewhat more powerful and direct than code-code relations because they can make specific text-text relations very specific.

Hyperlinks are also known as hypertext because once you create the relation between segments of data, you can link to them directly in the context of your data.

To create a hyperlink:

1. Select a quotation in the Quotation Manager.
2. Select **Hyperlink – Create Source Link**.
3. Select the target quotation (the one you would like to link to) in the Quotation Manager.
4. Select **Hyperlink – Create Link Target**.
5. Select the relation that links these two pieces of text.
6. You will recognize which quotations are
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hyperlinked because they are marked with a bracket: source quotations with the < and target quotations with the >.

7. Right-click a hyperlinked quotation, and select Show Links.

8. You will see all other pieces of data it is linked to; you can go directly to those data segments by choosing it from the list. Hence, you have created hypertext.

Build a user-defined relation

1. Follow steps 1-5 in on page 28-29, Creating Relations.

2. Select Open Relation Editor from the menu.

3. In Relation Editor, select New Relation from the Edit menu.

4. You will be prompted to define your relation. The most important:

   ⇒ Internal ID
       Choose something that makes sense to you.

   ⇒ Label 1 and 2
       A symbol that represents this particular relation and an alternative

   ⇒ Menu Text
       A brief description of the relation

5. This relation will now appear in your relation window anytime you link two nodes.

6. If you want to edit or delete a user-defined relation, you can also do that in the Relation Editor, which will be explained in the next section of this tutorial.

Editing Nodes and Relations

When you are working in the network view, it is important to understand that everything you do with nodes and relations does have an impact on the overall network that lies beneath your HU. Therefore, editing nodes and relations should be done so with careful thought and planning.
To remove a node from a network view:
1. Right-click on the node you would like to remove from the network view.
2. Select **Remove from View** from the context menu.
3. The node will disappear from the network view. If you have established a relation with that node, it will disappear as well.

**Note:**
If you select **Delete Node**, the entire node will disappear from your HU.

The Relation Editor

The Relation Editor enables users to edit the appearance, structure, and description of both default and created relations. This function can also be used to help you create and manage a variety of relations. For example, you can use the Relation Editor to manage relations that are relevant to different theories.

To edit a relation:
1. Go to **Networks** on the main menu.
2. Select **Relation Editor** from the menu. There are two options: **Code-code relations** or **Hyper-link**.
3. The Relation Editor window will appear. In order to edit a particular relation, it must be selected in the **Relations** window. Click on the relation to be edited.
4. A user can edit any of the following properties:
   - **Cosmetics**: (Label 1 and 2, Menu Text, Line Style)
Change the symbol(s), text, and line appearance associated with the relation.

**Preferred Layout Direction:**
Change the automatic layout algorithm, which can impact queries (transitive) but is mostly more cosmetic.

**Formal Property:**
Change the formal property associated, which is also cosmetic but mostly controls a network’s searchability. Assigning a transitive property enables a semantic query search.

**Comment:**
The comment for a relation can explain the what, why, and how of a particular relation.