NVIVO VISUALIZATIONS

Using Nvivo visualizations throughout a research project
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NVivo 11 for Windows

**Starter**
- Word cloud
- Word tree
- Compare diagram
- Explore diagram

**Pro**
- Mind map
- Concept map
- Project map
- Hierarchy chart
- Sunburst
- Chart
- Cluster analysis

**Plus**
- Egocentric sociogram
- Network sociogram
- Twitter sociogram
BEFORE CODING:
MIND MAPS
WORD CLOUDS
WORD TREES
New to NVivo? Get Started Here.

Follow these four simple steps to learn how to bring in a document, code content, view coding and run a query.

1. Bring in a Document

   Click the Data tab, and then click Documents and select any text file or document on your computer.

   Your document is imported as a source into the Internals folder.

   Double-click to open your file in a new tab.
WORD CLOUDS

- Click word cloud
- Specify grouping
- Click "all sources"
- R click to export
- Change the colors
WORD CLOUDS

Edit stop list
WORD TREES

excellent for
extremely important for both
for a living. I was
generations who turn away from
has caused George to stop
and larger impact on
his boat to make
increasing the number of "vibrant"
is to make a living

Thanks - I've been supporting
can help support
The decline of
local people in respect to
lot of **fishing**, almost all
is North Carolina allows
recreational **fishing**? Robert Limiting
net mending: pot preparation/maintenance/
attitudes towards the decline
By 1890, a community
for a big day
go on any kind
I think a lot
I'm coding any mention

business
actually, and I continue
and you have all
being down 80 percent
is now a 650
now. So, I remain
catches from Core Sound, the
communities? * #CarteretCounty http://t.co/
participating in a number
community . I think of Mary's
in the Community. In
continue to prosper to the
cottages . Very prevalent. In many
bulldozed and new three -
decline vary depending on the

**fishing**?

Down East

#Carteret#County - Hope

#CarteretCounty - Hope
is … h) The
efforts. Sea turtles will lay
families engulfed half of Shackleford
for a living as long
gear and camp fixin's for
Number 18: Table comparing
going on in the future.
WORD TREES

Search the word you are interested in
Click "Word Tree"

beach
WORD TREES

Change the formatting

Words that surround the word beach
MIND MAP: PLAN YOUR CODING SCHEME
MIND MAP: PLAN YOUR CODING SCHEME

Click "EXPLORE"

Click "Mind Map"
MIND MAP: PLAN YOUR CODING SCHEME
MIND MAP: PLAN YOUR CODING SCHEME

Saves in "Maps"
MIND MAP: PLAN YOUR CODING SCHEME

- Change map orientation
- Change bubble fill and outline
- Add a child idea
- Add a floating idea
- Add a sibling idea
Create nodes directly from mind map
MIND MAP: PLAN YOUR CODING SCHEME
FORMING RESULTS:
CLUSTER ANALYSIS
EXPLORE DIAGRAMS
PROJECT MAPS
COMPARISON CHARTS
CLUSTER ANALYSIS
CLUSTER ANALYSIS

Click cluster analysis

Choose to compare node or source similarity
CLUSTER ANALYSIS

Select how you want to be grouped (word/code/attribute similarity)

Select your cases or nodes to compare

Choose co-efficient
# How are cluster analysis diagrams generated?

This feature is available in NVivo Pro and Plus editions. [Learn more](#)

**NVivo 11 for Windows** | **Switch to NVivo for Mac**
---|---
This topic explains how the data underlying a cluster analysis diagram is generated.

## Measuring similarity

To measure the similarity between each pair of items that will appear in a cluster diagram, NVivo first builds a table where:

- the rows are the sources, nodes or words that will appear in the diagram, and
- the columns and cells depend on which characteristic you’ve chosen to cluster by.

<table>
<thead>
<tr>
<th>Table rows</th>
<th>Clustered by</th>
<th>Table columns</th>
<th>Table cells</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sources</td>
<td>Word similarity</td>
<td>Each different word that appears in the text of the sources</td>
<td>The number of times the column’s word appears in the row’s source</td>
</tr>
<tr>
<td></td>
<td>Coding similarity</td>
<td>Each node that codes the source’s content</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Attribute value similarity</td>
<td>Each different attribute value of the sources (e.g. Book Year = 2010)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 if the column’s node codes the row’s source, 0 otherwise</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 if the row’s source has the column’s attribute value, 0 otherwise</td>
<td></td>
</tr>
<tr>
<td>Nodes</td>
<td>Word similarity</td>
<td>Each different word that appears in the text of the nodes</td>
<td>The number of times the column’s word appears in the row’s node</td>
</tr>
<tr>
<td></td>
<td>Coding similarity</td>
<td>Each source coded by the row’s node</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Attribute value similarity</td>
<td>Each different attribute value of the nodes (e.g. Person/Sex = Female)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 if the column’s source is coded by the row’s node, 0 otherwise</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 if the row’s node has the column’s attribute value, 0 otherwise</td>
<td></td>
</tr>
<tr>
<td>Words (top 100 words in Word Frequency query results)</td>
<td>N/A</td>
<td>Each source or node that the query searches in</td>
<td>The number of times the row’s word appears in the column’s source or node</td>
</tr>
</tbody>
</table>

NVivo then calculates a similarity index between each pair of items (each pair of rows in the table) using the similarity metric you’ve selected:

- Pearson correlation coefficient ($-1$ = least similar, $1$ = most similar). For more information, refer to the Wikipedia article [Pearson product-moment correlation coefficient](#).
- Jaccard’s coefficient ($0$ = least similar, $1$ = most similar). For more information, refer to the Wikipedia article [Jaccard index](#).
- Sørensen’s coefficient ($0$ = least similar, $1$ = most similar). For more information, refer to the Wikipedia article [Sørensen similarity index](#).
## Types of cluster analysis diagrams

When you create a cluster analysis diagram, by default it is displayed as a horizontal dendrogram. You can select from a gallery of cluster analysis diagrams—experiment with the diagram types to find the one that best fits the project items you are exploring.

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>2D Cluster Map</td>
<td>A two-dimensional diagram where similar items are clustered together and different items are further apart.</td>
<td><img src="example2dclustermap.png" alt="Image" /></td>
</tr>
<tr>
<td>3D Cluster Map</td>
<td>A three-dimensional diagram where similar items are clustered together and different items are further apart. The diagram can be rotated in three dimensions.</td>
<td><img src="example3dclustermap.png" alt="Image" /></td>
</tr>
<tr>
<td>Horizontal Dendrogram</td>
<td>A horizontal branching diagram where similar items are clustered together on the same branch and different items are further apart. Dendrograms can be useful for comparing pairs of items.</td>
<td><img src="examplehorizontaldendrogram.png" alt="Image" /></td>
</tr>
<tr>
<td>Vertical Dendrogram</td>
<td>A vertical branching diagram where similar items are clustered together on the same branch and different items are further apart. Dendrograms can be useful for comparing pairs of items.</td>
<td><img src="exampleverticaldendrogram.png" alt="Image" /></td>
</tr>
<tr>
<td>Circle Graph</td>
<td>A circle where all the items are represented as points on the perimeter. Similarity between items is indicated by connecting lines of varying thickness and color. Dissimilarity is indicated by red lines—thicker lines indicate stronger similarity.</td>
<td><img src="examplecirclegraph.png" alt="Image" /></td>
</tr>
</tbody>
</table>
Cluster by word, coding or attribute value similarity

The sources or nodes in a cluster analysis diagram can be clustered by word similarity, coding similarity or attribute value similarity.

<table>
<thead>
<tr>
<th>Cluster by</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Word similarity</td>
<td>The words contained in the selected sources or nodes are compared. Sources or nodes that have a higher degree of similarity based on the occurrence and frequency of words are shown clustered together. Sources or nodes that have a lower degree of similarity based on the occurrence and frequency of words are displayed further apart. Stop words are excluded when using this measure of similarity—refer to Set the text content language and stop words for more information.</td>
</tr>
<tr>
<td>Coding similarity</td>
<td>The coding at the selected sources or nodes is compared. Sources or nodes that have been coded similarly are clustered together on the cluster analysis diagram. Sources or nodes that have been coded differently are displayed further apart on the cluster analysis diagram.</td>
</tr>
<tr>
<td>Attribute value similarity</td>
<td>The attribute values of the selected sources or nodes are compared. Sources or nodes that have similar attribute values are clustered together on the cluster analysis diagram. Sources or nodes that have different attribute values are displayed further apart on the cluster analysis diagram.</td>
</tr>
</tbody>
</table>
CLUSTER ANALYSIS
CLUSTER ANALYSIS
EXPLORE DIAGRAMS
EXPLORE DIAGRAMS

"EXPLORE" diagram will appear once you click interested topic. Click here 2nd

First click what you are interested in exploring

A case? A specific code?

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EXPLORE DIAGRAMS

Can look crazy at first- modify by adjusting what is shown
EXPLORE DIAGRAMS

Click “change focus” and get a new map with the newly clicked subtopic at the center.

Explore other connections by clicking subtopics surrounding the original topic.
EXPLORE DIAGRAMS

Can also click “back” to go back to map before
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Your document is imported as a source into the Internals folder.

Double-click to open your file in a new tab.

Name
Click “Add project item”

What are you interested in?
Click on interested topics Nodes, cases etc

Start small-you can always add more
Click arrow in “add associated items” pane
PROJECT MAPS

Shows any item associated with whatever node or case you chose.
Drag and drop associated items onto the map
PROJECT MAPS

Organize with layout options

Customize map
COMPARISON DIAGRAMS

EXPLORE tab

Choose what you want to compare

Comparison Diagram
Choose two items of interest
COMPARISON DIAGRAMS

Middle terms are what they have in common

Items not shared

Show more or less
COMPARISON DIAGRAMS

Middle terms are what they have in common

Show more or less

Items not shared
DISPLAYING RESULTS:
CHARTS
HIERARCHICAL CHARTS
SUNBURST
Click "Chart"
Set what values/source/nodes you want
CHARTS

Change type of chart

Formatting

Change axes

Click in to explore /export
Bar charts are useful when comparing quantities or analyzing an increasing or decreasing trend. Variations on this type of chart include:
- Simple bar chart
- Stacked bar chart
- 100% stacked bar chart
- Grouped bar chart

Column charts are also useful when comparing quantities or analyzing an increasing or decreasing trend. Variations on this type of chart include:
- Simple column chart
- Stacked column chart
- 100% stacked columns chart
- Grouped column chart

Pie charts effectively show the proportion of different parts that make up a whole.

Bubble charts show varying density of data when comparing combinations of variables.

Heat maps show varying density of data when comparing combinations of variables or matrices.

Radar charts effectively display direction or trend when comparing several variables.
HIERARCHICAL CHARTS
HIERARCHICAL CHARTS

Click "hierarchy chart"

Select what you are interested in
HIERARCHICAL CHARTS

Use for visualizing multiple attribute values
Hierarchical Charts

Change color

Change Type of chart and view level
HIERARCHICAL CHARTS: SUNBURST

Sunburst chart

Click on slices to dive deeper
HIERARCHICAL CHARTS: SUNBURST
• DISCLAIMER: Must have be a ‘master’ Nvivoer for this!
• Only works as well as you coded it
SOURCE

- https://www.youtube.com/watch?v=2wjMp-L-JDk