



MAXQDA – The Art of Text Analysis

New Features in MAXQDA 10

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1. MAXQDA Version 10: Overview

1.1 “Simply better”

What’s new in **MAXQDA10**? Why should **MAXQDA** 2007 users upgrade? The new **MAXQDA** is even easier to use and is many ways **simply better**. All together there are 132 changes, ranging from simple improvements to new functions that gave our programmers a lot of work to do.

Our philosophy with the new version was the same as always: **MAXQDA** should be the leading program for sociology-oriented analysis of qualitative data, focusing primarily on text analysis. **MAXQDA** shouldn’t become a video analysis or image-archiving program, which is why the motto remains the same: “**MAXQDA** – The art of text analysis”.

Our focus is still on those who actually carry out the research – through open interviews, group discussions, field studies, etc. – and want to systematically evaluate their collected data. The analysis is not fixed to a certain method, but can cover the whole spectrum from more structure procedures like that of the Mayring school to Grounded Theory-oriented methods. Work with **MAXQDA** is generally category-based, which means that the researchers themselves interpret, classify, and categorize the material. **MAXQDA** supports this process and can even take over the automatic search and code functions.

1.2 Lots and lots of (colorful) improvements

As already mentioned, the list of changes is long and includes more than 130 improvements and new features compared to **MAXQDA** 2007. Entire arsenals of new functions are hidden behind some of the single points: the user-interface, for example, was completely overhauled, which means not only the reworking of over 100 icons, but also the development of many new, more functional dialog fields.

1.3 Highlights

The development of **MAXQDA** is embedded in the development of sociological research methods. While **MAXQDA** is used by researchers in many different disciplines, as well as in the praxis, the focus of **MAXQDA**’s development is the sociological application in qualitative social research and



Mixed Methods approaches. In the development of the new version, which lasted almost 18 months, five points were especially important:

1. *Visualization as an analytical instrument* – Many new aspects were included already in the last two versions of **MAXQDA**, which are being copied in other QDA programs.
2. *Integration of qualitative and quantitative methods* – This field has been a focus from the very beginning of **MAXQDA** development, and with the exception of QDA Miner, **MAXQDA** is the only QDA software that allows for such easy, uncomplicated method integration.
3. *Addition of spatial dimensions with geo-referencing* – **MAXQDA 2007** was the first QDA program to offer systematic geo-referencing, allowing for geolinking in **MAXMaps**, for example. It is now possible to switch directly between **MAXQDA** and Google Earth in presentations.
4. *Synchronized display of audio/video and transcribed text* – with the integration of a media player, **MAXQDA 10** offers you a direct connection between your transcription and the media file. You can do the transcription directly in **MAXQDA** or use the free, professional transcription software F4; timestamps from F4 documents are fully functional in **MAXQDA** as well.
5. *Full support for PDF documents* – this is one of the new features consistently requested by **MAXQDA** users. PDFs can now be imported; they are displayed in **MAXQDA** exactly as in Adobe Acrobat; and, of course, they can be coded.

There are ten concrete changes that we want to highlight and describe:

1. The completely reworked user interface
2. Simply practical: the search windows and tab options
3. Memos: a new design
4. DOC documents
5. PDF documents



6. Visual presentation: the new models in **MAXMaps**
7. Connection to audio/video files from transcripts
8. New Mixed Methods tools: variables for each speaker in group discussions
9. Coding of image files
10. Geo-referencing

2. Short descriptions of the top 10 changes in MAXQDA10

2.1 It's pretty, isn't it? The reworked user interface

The first thing you will notice when you see the new version is the new user interface. The icons are now three-dimensional and have a Windows Vista look. The various toolbars can be shown or hidden, moved around within the toolbar area, or even freely dragged anywhere on the screen. We kept the classic **MAXQDA** look with the four main windows, so you'll still feel at home and won't have to re-learn the program; you won't have any problem finding the functions you're so familiar with.

It's all about the details

Almost every single aspect of the **MAXQDA** screen was reworked: icons, code stripes, dialogue fields, memo visualization, and much more. The new toolbars are especially practical. Not only can they be hidden and rearranged as you wish, they can also be moved anywhere on the screen. Regardless of how big your monitor is, you can now arrange the Code Toolbar to be right next to the Text Browser. The Text Browser, by the way, is now called the Document Browser, since **MAXQDA** can now import image and PDF files, and therefore isn't limited to the analysis of texts.

All dialogue windows were also overhauled, and not just visually. They now offer more functionality as well. The Memo Manager, for example, displays a preview of each memo, similar to the two-window structure in the coding overview.

2.2 Simply practical: search windows and tab options

You may be familiar with the small search bar in Adobe Acrobat, which allows you to do quick searches for words or phrases in a document. If the search returns more than one hit, you can



toggle from one to the next. This kind of search bar is now integrated into all four windows of **MAXQDA**.

Using tabs for internet browsing has become the norm, and this is now also possible in **MAXQDA**. Several texts, image files, and/or PDFs can be opened simultaneously in the Document Browser, which allows you to quickly switch back and forth between documents that you want to code simultaneously. You can also open more than one memo at a time with tabs in the Memo Manager.

2.3 Memos – a new design

No QDA software has memo functionality coming anywhere close to that which **MAXQDA** offers, and **MAXQDA10** comes with even more improvements in this area. The Memo Manager allows you to browse through your memos, compare them quickly via the tabbed window, and integrate or summarize them in new memos.

The memo window is now much more flexible: it can be resized to fit the amount of text, and a whole array of Rich Text formatting options have been added.

2.4 DOC files

MAXQDA 10 can now import and code DOC and DOCX files. You only need to have a version of Microsoft Office installed on your computer.

The protocol for working with DOC files is the same as that for Rich Text documents. As in previous versions of **MAXQDA**, the imported documents become part of the project file: one project = one file. This means that **MAXQDA** has full control of the text once it has been imported – it can be added to, modified, and highlighted as you wish. This makes the transfer of projects in a teamwork setting or over the internet much easier, because you only need to keep track and transfer a single file.

2.5 Complete support for PDF files

With **MAXQDA10**, you can now import and code PDF documents. PDFs are handled in their own format, meaning they aren't converted to Rich Text, but rather retain their exact formatting. In **MAXQDA**, they look exactly like they do in Adobe Acrobat or in a printout.



PDF documents are, however, dealt with somewhat differently than RTF or DOC files. For RTF and DOC files, the rule is “one project = one file” (see 2.4). This is also the case with PDFs, but only to a certain point. Since PDFs can be fairly large, including them as part of the project file could make the project file too big to transfer or send by e-mail, defeating the whole purpose of keeping everything together in one file. PDFs are therefore only imported until the project file reaches a certain size, after which point, a link to the file will be inserted rather than the actual file. You can set the limit to fit your needs (default is 10 MB). This does come with some risks, since **MAXQDA** no longer has exclusive control of files that aren’t imported. If another program would view, edit, or delete the linked PDF file, the codings that you created in **MAXQDA** would no longer be correct. When **MAXQDA** starts, it always checks to make sure that all external files still exist. If they are not found, they are listed as missing in the Document System window.

2.6 Visual presentation: the new models in MAXMaps

MAXQDA10 now makes it even easier to illustrate the connections in your data set. We created model templates based on oft-used illustrations, which can now be applied to your data automatically.

Five various models can be applied, each of which has various settings that you can change according to your needs. The settings decide which elements are included in the automatically-created map.

- 1. One-Case Model** – All relevant data attached to a document is illustrated in the map. This includes all appropriate memos, codes, and codings.
- 2. One-Code Model** – This model is very similar to the One-Case Model, except that a code is the focus rather than a document. The coded segments and memos attached to the code are included in this model along with any memos that are linked to the code.
- 3. Code Theory Model** – This model is especially helpful for the development of theory. It automatically displays all memos (with their ideas and hypotheses) attached to a specific code.
- 4. Code Co-Occurrence Model** – This model illustrates the associations and intersections between selected codes. One or more codes are selected and dragged onto the **MAXMaps** window. All



codes that intersect with any of these selected codes are then automatically inserted with an arrow connecting them to the code with which they intersect. The width of this arrow is dependent on the number of intersections. The model can be made more complex by including the subcodes in the visualization.

5. Code-Subcode-Segment Model – This is the most complex of the five models. The subcodes, connected memos, and the coded segments for all selected codes are illustrated in a single model.

With just a few clicks, very complex visualizations can be created with the model templates. They can also be quickly and easily modified and added to in **MAXMaps**. The results can easily be used in presentations or printed out (even for large posters). The layers function in **MAXMaps** allows you to create various layers, which can be used to represent steps in the research process or to highlight specific aspects of the visualization in a presentation. For printing large posters, it is recommended that visualizations be exported in EMF format, the vector-based Windows extended metafile format.

2.7 Connection to audio/video files from transcripts

It is often very practical to have access to the original media file when analyzing a transcript, whether it be an audio or video file. **MAXQDA 10** makes it possible to associate an audio or video file to every transcript. With timestamps, which are displayed in **MAXQDA** very much like codings and memos in the Document Browser, it is easy to jump from the transcript to an exact spot in the associated multimedia file. The new built-in **MAXQDA** media player allows you to play these files directly in the program. A timestamp list allows you to insert comments for each segment, which can later be searched for, allowing you to jump directly to the segment in the file or transcript.

2.8 New Mixed Methods tools: variables for speakers in group discussions

It was already possible in the first version of **MAXQDA** to set global variables for imported documents. This is fully adequate for standard interview techniques: a single person is interviewed, the interview is transcribed, and it is imported into **MAXQDA**. The same person fills out a standardized questionnaire, which is also imported and associated with the interview.



The text-level attributes were not sufficient, however, for group discussions, because more than one person is being interviewed, and it wasn't possible to add more than one value for each attribute. With **MAXQDA10**, this is now possible. Profile variables can even be defined for subcodes so that variables can be defined for each speaker taking part in a group discussion.

2.9 Coding of image files

MAXQDA10 can also work with image files – which in previous versions could only be used as elements of a text and could only be coded as a whole. With the new version, however, images can be imported into the Document System and sections of the image can be selected and coded. **MAXQDA** should definitely not be used as a picture archiving program – there are many other programs like iPhoto that are much better able to carry out such functions – but it is sometimes very helpful to be able to code aspects of images in a sociological research project.

2.10 Geo-referencing

Every possible location in Google Earth™ can be linked to any part of a **MAXQDA** document or code. And not only that! A **MAXQDA** geolink can also be inserted as a free object in **MAXMaps** or used as a hidden hotspot in a **MAXMaps** graphic (e.g. in a photo or symbol) – clicking on the graphic zooms you in to the connected geographic point. This function was first made available in a free update for **MAXQDA 2007**, and in **MAXQDA10**, the function has been made even better. It is now possible to create a connection to the leading geographic information software Arc-GIS.



3. Complete support for PDF files

MAXQDA can now work with PDF files, meaning you can import, code, link, and much more. This opens new doors for researchers, who can, for example, now work with:

- documents that are only available as PDFs,
- dissertations and MA theses, and
- websites that are saved to capture their exact layout in programs such as Nitro PDF (www.nitropdf.com).

In addition, it is now theoretically possible to scan any document, save it as a PDF, and use certain software programs to transform the picture of the document into text, so that the text search functions can be used in **MAXQDA**. You can also code relevant text segments in academic literature that you are using for your research.

MAXQDA displays PDFs exactly as they would be printed or displayed in Adobe Acrobat. They are displayed in top quality, true to the original document. A comparison with the PDF features offered by other QDA software makes the **MAXQDA** advantages clear.

3.1 Display and navigation in PDFs

PDFs can be imported in **MAXQDA** just like other documents – either through the menu option *Import document* or by dragging the documents onto the Document System window. A special PDF icon makes it clear which documents in your Document System are PDFs.

PDF documents are displayed in the Document Browser as complete pages, which means only one page is visible at one time. A new navigation toolbar includes icons that allow for the following functions:

- Zoom in/out
- Set the size so that the PDF fits horizontally in the window
- Set the size so that the PDF fits vertically in the window
- Go to next/previous page

The status bar at the bottom of the screen shows the page number currently displayed in the Document Browser.



3.2 Coding and writing memos

Text in PDF documents can be coded just like in Rich Text documents. You must first highlight the segment to be coded and then assign a code – all standard functions work as with other text documents, including the in-vivo coding option.

Memos that connect to certain text segments are inserted in the standard manner, by double-clicking in the memo column next to the text and typing the memo. Text links, external links, and geolinks can also be created by selecting text segment, right-clicking on the selection, and selecting the appropriate option from the context menu that appears. The existence of a link will be shown with a blue square around the linked text, and a geolink is indicated by a green square.

3.3 Special characteristics with PDFs

The PDF format (Portable Document Format) is different from DOC and RTF documents in several ways. It was originally developed by Adobe to create documents that could be viewed and printed by anyone, regardless of their hardware platform or operating system. PDFs are structured by page rather than sequential paragraph as is the case in most text documents. Text is often separated into columns in PDF documents, and there isn't really any paragraph structure even inside each text field. You can see this by copying text from a PDF and pasting it into Word. You'll see that a paragraph break is inserted after almost every single line of text. It is for this reason that PDF documents aren't broken up into numbered paragraphs in **MAXQDA** as is the case with DOC and RTF documents. **MAXQDA** views each page in a PDF as a paragraph, which means that the paragraph number in the table view will always be "1."

3.4 The "one file = one project" principle

MAXQDA was originally developed for the analysis of qualitative data in sociological research. This usually means that the data set for the research project is collected by the researcher (e.g. in the form of narrative interviews, field notes, observation notes, etc.). The total number of documents is not usually extremely high, since most qualitative research is based on a relatively small sample group. "Small" is of course relative: as far as file size is concerned, 2000 pages of interview text is not much, but if one is planning on analyzing this text, 2000 pages looks like a very large amount. For **MAXQDA**, the standard concept is that all files are imported into the project file: one project =



one file. The fact that **MAXQDA** imports all files to be analyzed and has control over them makes things a lot easier. Unlike with other competing QDA software packages, it can't happen with **MAXQDA** that you accidentally edit certain files with other programs and thereby lose all the coding work that you had done up to that point. And since you are only dealing with a single file, it's very easy to transfer or exchange projects over the internet or via email. This concept isn't always compatible with PDFs, however, since you can import hundreds of megabytes of PDFs into **MAXQDA** in a matter of seconds. This is very different from the classical qualitative research. PDFs are documents that normally can't be edited, which makes their import into **MAXQDA** not always necessary. Plus, the potential file size makes the exchange of projects over the internet almost impossible. **MAXQDA** is therefore programmed to import PDFs only until the project file size reaches a certain point. The default size is set at 10 megabytes, but you can also change this through the *Options* screen in the *Project* drop-down menu. After the limit is reached, PDFs will simply be linked to rather than imported.

3.5 PDF or DOC/RTF?

If you are producing the documents to be analyzed in your research project, you should always choose the DOC or RTF file type when possible. Texts in DOC and RTF format can be easily edited in **MAXQDA**, and the paragraph numbering allows for more complex text retrieval options (e.g. when searching for codes that appear together in the same paragraph). The visualizations are also more precise with the paragraph separation, and a direct synchronization between multimedia files and a transcription are only possible in DOC and RTF formats.

3.6 Automatic coding and MAXDictio with PDFs

With the help of the lexical search in **MAXQDA**, you can also search for words in PDF documents, display the hits, and jump from one hit to the next in the original text. The automatic coding of the hits is also possible. Because there is no paragraph differentiation in PDFs, however, it is not possible to specify that the sentence or paragraph containing the search term be coded. Only the search term itself will be coded. If you want to code a larger text segment, you must do so manually in the Document Browser. The content analysis add-on tool **MAXDictio** will also soon support PDFs, but only supports RTF and DOC files in the current version.



4. The new model templates in MAXMaps

With the new model templates, using the one-of-a-kind **MAXMaps** tool to visualize connections and patterns in your data set is made even easier. During the research process, it is often the case that one focuses on a single part of the material: on a specific text, code, code overlap, or on a specific hypothesis or theoretical aspect addressed in a memo. The new models offer quick, accessible solutions for these situations, and they can be tweaked to fit your specific data set and research focus. **MAXQDA** uses your settings and data to create an appropriate diagram in **MAXMaps**. This map can be edited, added to, or rearranged as you see necessary. It produces results that you can literally see: the graphics quality is superb, and with the newly-available EMF format (Windows Enhance Metafile), you can even print out your maps as large posters for presentations.

There are five different models:

1. **One-Case Model** – All relevant data attached to a document is illustrated in the map. This includes all appropriate memos, codes, and codings.
2. **One-Code Model** – This model is very similar to the One-Case Model, except that a code is the focus rather than a document. The coded segments and memos attached to the code are included in this model along with any memos that are linked to the code.
3. **Code Theory Model** – This model is especially helpful for the development of theory. It automatically displays all memos (with their ideas and hypotheses) attached to a specific code.
4. **Code Co-Occurrence Model** – This model illustrates the associations and intersections between selected codes. One or more codes are selected and dragged onto the **MAXMaps** window. All codes that intersect with any of these selected codes are then automatically inserted with an arrow connecting them to the code with which they intersect. The width of this arrow is dependent on the number of intersections. The model can be made more complex by including the subcodes in the visualization.
5. **Code-Subcode-Segment Model** – This is the most complex of the five models. The subcodes, connected memos, and the coded segments for all selected codes are illustrated in a single model.

The models make it possible to explore the data in a unique way. All elements of the map are directly synchronized with the **MAXQDA** project, which means you can see the content of memos and codings by simply moving your mouse over the appropriate icons. By double-clicking, you'll be taken directly to the appropriate part of the document. All model templates can be accessed in **MAXMaps** via the *Map* drop-down menu under *New model*.



4.1 The One-Case Model

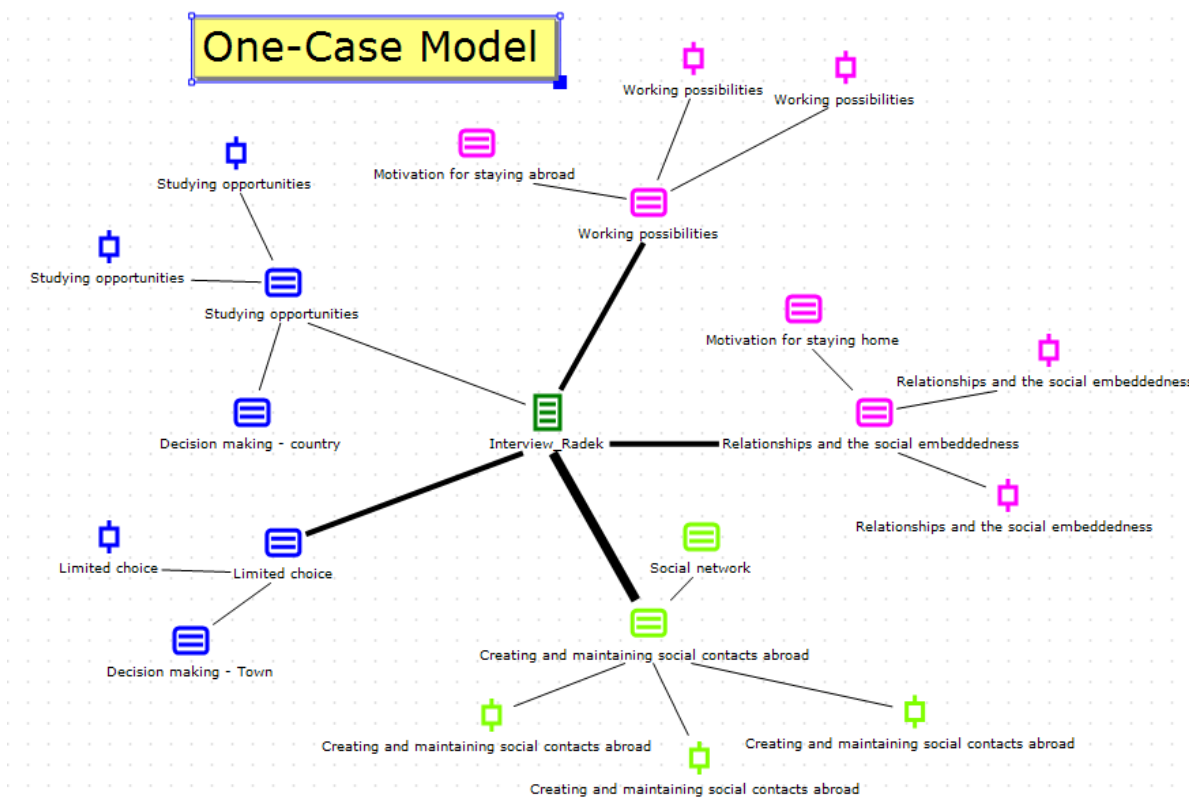
Function of this model

In this model, a document from the *Document System* is at the center of the analysis. After selecting the model from the menu, the document to be analyzed is dragged onto the **MAXMaps** workspace. The purpose of the visualization is to make the memos, codes, and code segments for the selected document accessible.

Model display in the map

The elements of the model will be displayed in the map with the document in the middle of the workspace and the other elements arranged in a star pattern around it. If memos are included, they are positioned at the top of the map.

The various elements are connected to the text by lines with seven levels of thickness. The thickness of each line is defined by the number of text segments coded with the particular code – the thicker the line, the higher the number of coded segments. It could be that in some cases a text has dozens and dozens of codes or memos, or that a very high number of text segments were coded. For this reason, you have the option of setting a maximum number of codes, memos, and text segments to be displayed, as well as the option of changing the exact search criteria.



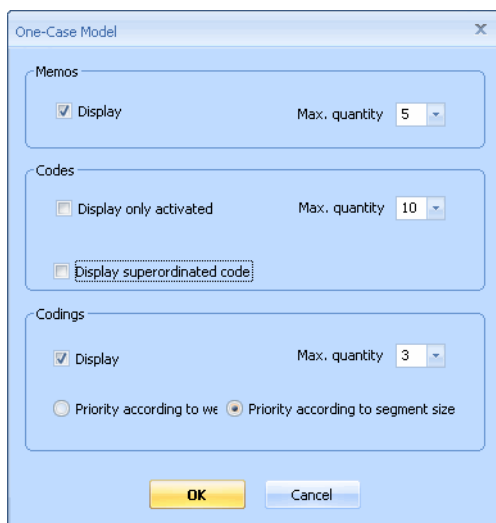


Model Options

In the One-Case Model, the following elements can be included in the visualization:

1. Memos: both those attached to a text segment in the selected document and the memo attached to the document itself in the Document System.
2. Codes that are used in the selected document.
3. Segments that have been coded with the codes from point 2.

Model options in detail



a) Memo options

- Display memos. If this box is not checked, no memos will be displayed in the map. If the box is checked, you can also set the maximum number of memos to be displayed.

b) Code options

- Display only activated codes. Only those codes are displayed that you already activated in the Code System window.
- Maximum quantity of codes to be displayed. If there are more codes than the set maximum quantity to be displayed, the codes will be ranked according to quantity. If, for example, there are 11 codes, and the maximum is set to 10, the 10 most-used codes in the selected document will be displayed.
- You also have the option of always displaying the superordinated code.

c) Coding options

- Display codings. If this box is checked, codings will be displayed for each of the codes. You can set the maximum number of codings to be displayed per code.
- If there are more codings than the maximum to display, you have the option of ranking the codings by weight (relevance) or by length (measured in bytes) of the coded segments.



In Sync Mode

Document icon

- a) Mouse over: displays the document memo.
- b) Double-click: highlights the document in the Document System.
- c) Second double-click: opens the document in the Document Browser.

Memo icon

- a) Mouse over: shows a preview of the memo.
- b) Double-click: highlights the document in the Document System, opens the document in the Document Browser, and moves to the point in the document where the memo is positioned.
- c) Second double-click: opens the memo.

Code icon

- a) Mouse over: shows a preview of the code memo.
- b) Left-click: highlights the code in the Code System window.

Coding icon

- a) Mouse over: shows a preview of the code memo.
- b) Left-click: highlights the code in the Code System window, opens the document in the Document Browser, and moves to the point in the document where the coding is found.
- c) Right-click: shows context menu, where you have the option of displaying the entire coded segment in the map.

4.2 The One-Code Model

Function of this model

A code is the focus of this model. After selecting the model in **MAXMaps**, the code must be dragged onto the **MAXMaps** workspace.

The purpose of this model is to display the selected code with all its connected memos and codings.

The One-Code Model is similar to the One-Case Model, except that a code is the focus rather than a document.

Model display in the map

In this model, the code memo, other memos linked to the code, and all the document segments coded with the selected code can all be displayed. The code icon is put in the center of the work space, and the other elements are arranged in a circle around it. Lines connect all the elements to the code.

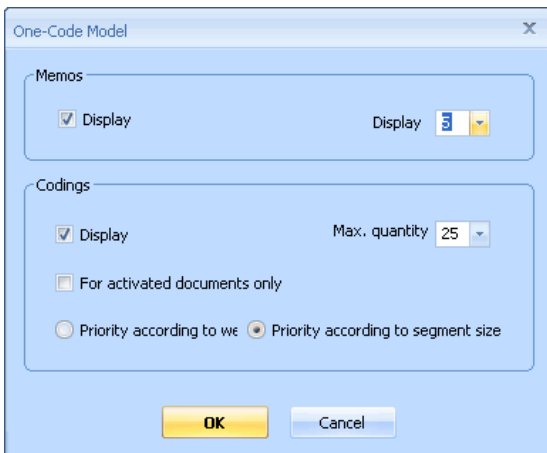


Model options

The following elements can be displayed in the One-Code Model:

1. Memos: both the code memo and any memos linked to the code.
2. Codings.

Model options in detail



a) Memo options

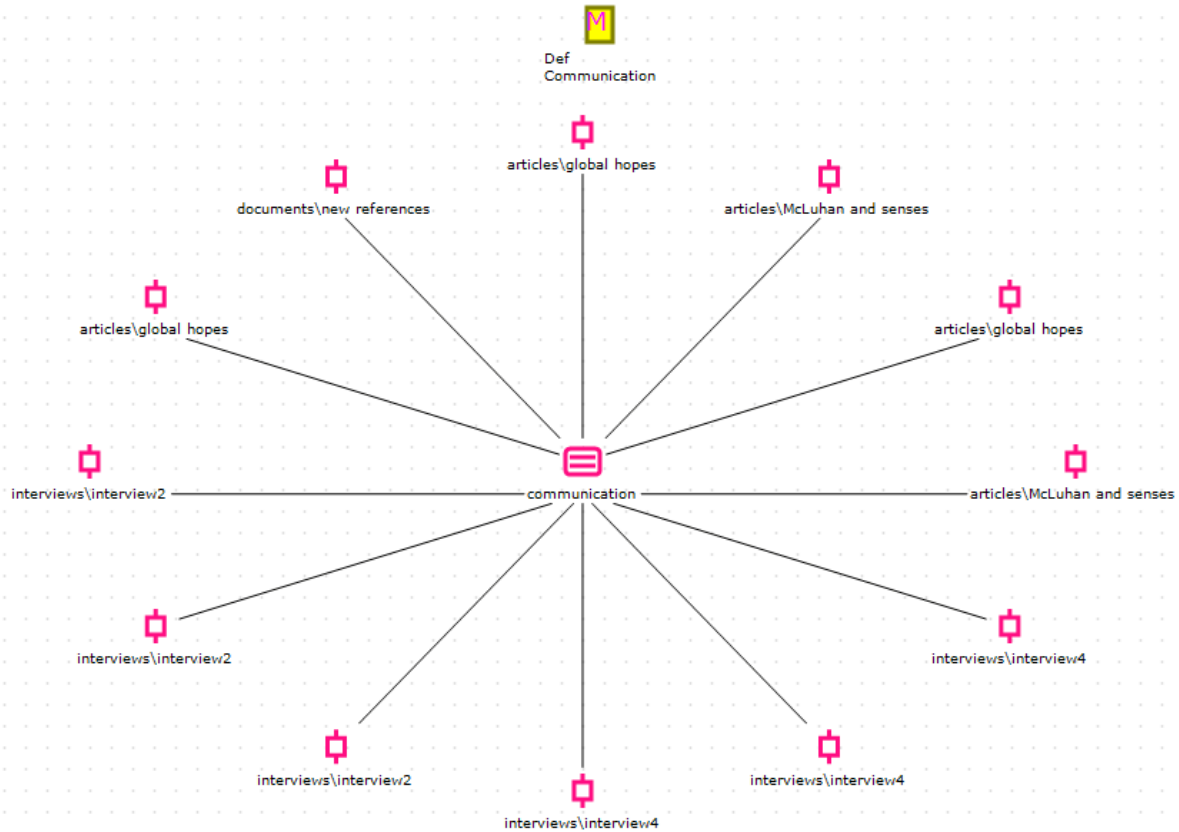
- Display memos. If this box is not checked, no memos will be displayed in the map. If the box is checked, you can also set the maximum number of memos to be displayed.

b) Coding options

- Display codings. If this box is checked, codings will be displayed for each of the codes. You can set the maximum number of codings to be displayed per code.
- Display only codings in activated documents.
- If there are more codings than the maximum to display, you have the option of ranking the codings by weight (relevance) or by length (measured in bytes) of the coded segments.



One-Code Model



In Sync Mode

Memo icon

- Mouse over: shows a preview of the memo.
- Double-click: highlights the document in the Document System, opens the document in the Document Browser, and moves to the point in the document where the memo is positioned.
- Second double-click: opens the memo.

Code icon

- Mouse over: shows a preview of the code memo.
- Left-click: highlights the code in the Code System window.

Coding icon

- Mouse over: shows a preview of the code memo.
- Left-click: highlights the code in the Code System and the document in the Document System.
- Double-click: opens document in the Document Browser and moves to the position of the coding.
- Right-click: shows context menu, where you have the option of displaying the entire coded segment in the map.



4.3 The Code Theory Model

Function of this model

A code, its subcodes (optional), and the memos attached to these code(s) are displayed in this model.

Model display in the map

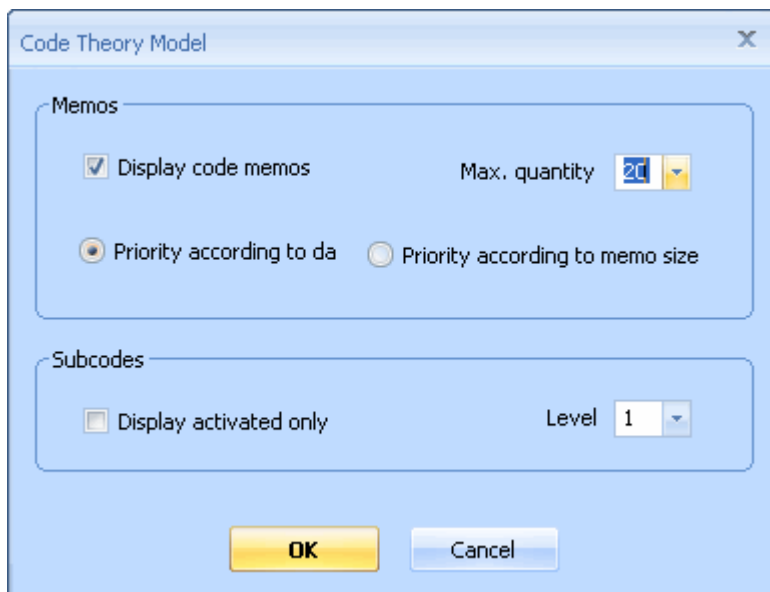
The code icon is put in the center of the map with the subcodes arranged in a circle around it. Subcodes can be arranged on two hierarchical levels, with the first level forming an inner circle around the code, and the second level forming an outer circle. The memos are connected to the codes/subcodes with a line. Since memos can be linked to more than one code, each code may be connected with several lines.

Model options

In the Code Theory Model, the following elements can be included in the visualization:

1. Memos that are attached or linked to the selected code (and its subcodes, if desired).
2. Subcodes of the selected code.

Model options in detail



a) Memo options

- Display memos. If this box is not checked, no memos will be displayed in the map. If the box is checked, you can also set the maximum number of memos to be displayed. If there are more memos than the set maximum quantity to be displayed, the memos will be prioritized according to creation date (newer codes get priority) or according to the size (longer memos get priority).

b) Subcode options



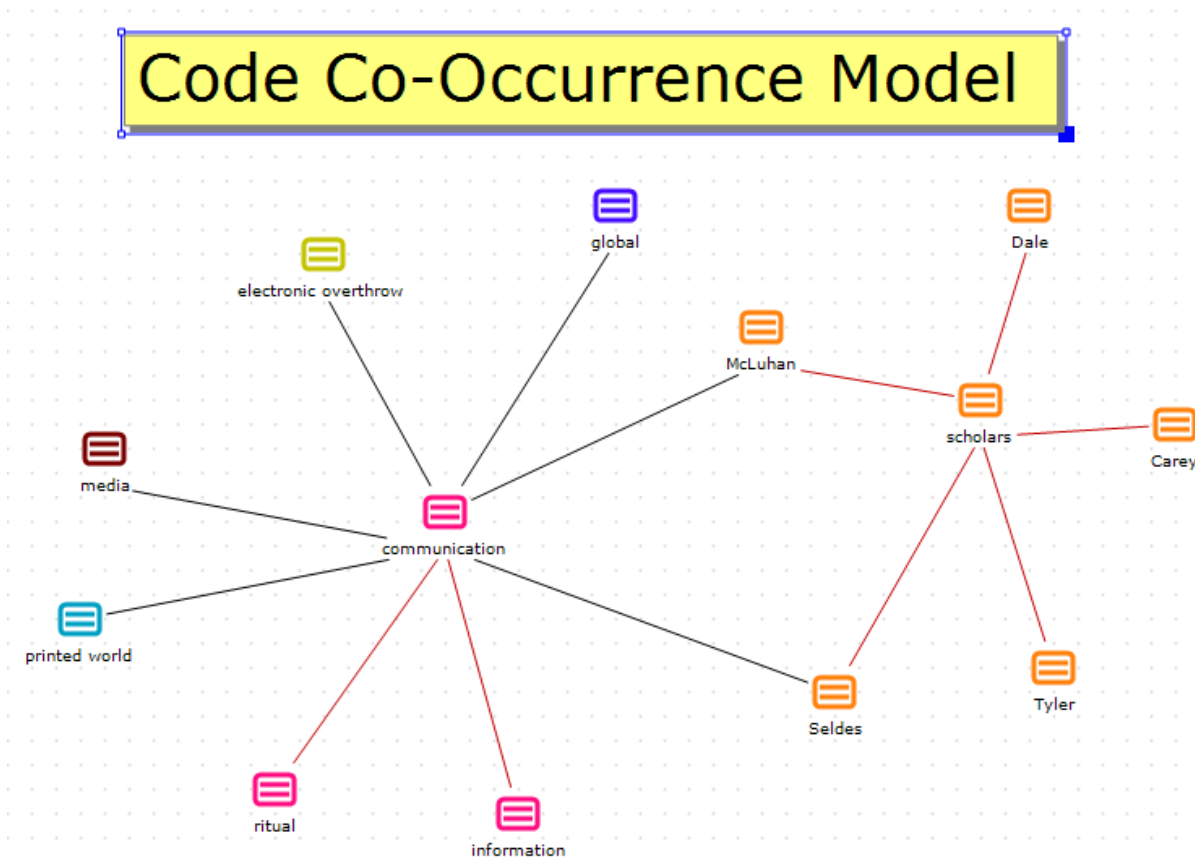
4.4 The Co-Occurrence Model

Function of this model

This model displays the intersections (or co-occurrences) of selected codes with other codes. It is also possible to make the model more complex by including subcodes.

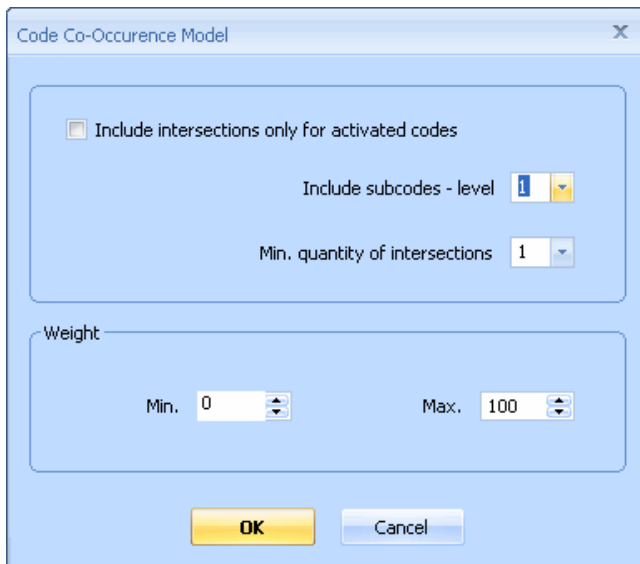
Model display in the map

One or more codes are selected and dragged onto the **MAXMaps** work space. These codes are connected with a black line to the code(s) with which they intersect. The thickness of the lines indicates the frequency of the intersections. If the two codes intersect many times, the line connecting the two will be thicker. Codes are connected to their subcodes with red lines.





Model options in detail



a) Code/Subcode options

- You can now select which codes are to be included in the map.
- The visualization can be limited to include only intersections with activated subcodes.
- You can select how many levels of subcodes are to be included (0 = none; 1 = only the first level; 2 = the first two levels).
- The minimum number of intersections can also be set. If this minimum number of intersections isn't reached, the connections will not be included in the map.

b) Co-Occurrence options

- By selecting a certain required code weight, you can limit the displayed intersections according to its relevance. By setting the required weight to 80 to 100, for example, one would analyze only those codes, to which you the researcher assigned such a high value.

In Sync Mode

Code/subcode icon

- a) Mouse over: displays a preview of the code memo.
- b) Left-click: highlights the code in the Code System window.



4.5 The Code-Subcode-Segments Model

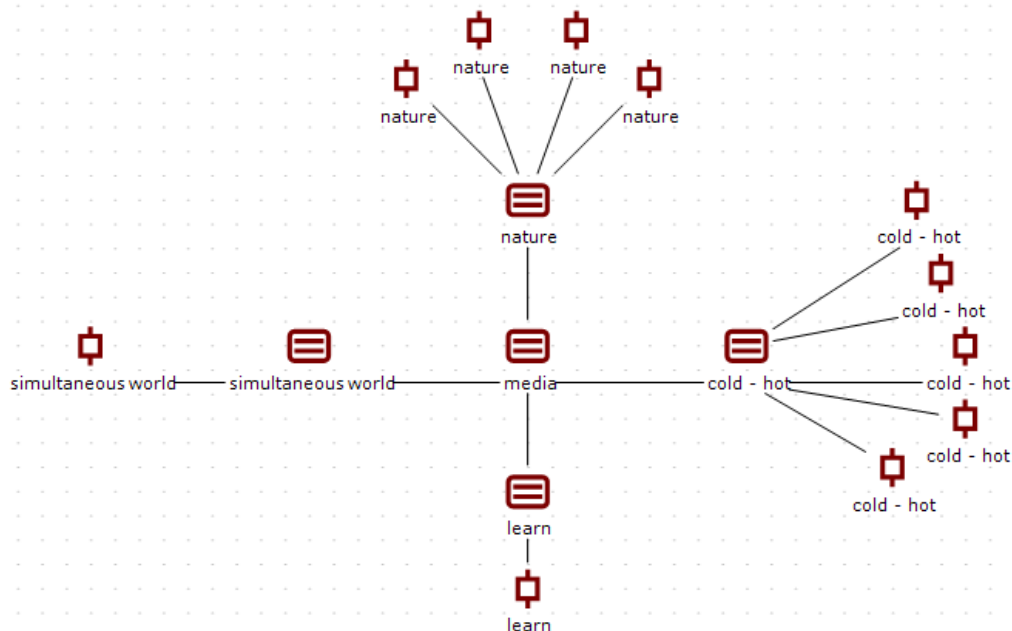
Function of this model

This model creates a map with a selected code, its subcodes, and the segments coded with these codes. This model is similar in many ways to the One-Case Model except that a code is the focus, rather than a document.

Model display in the map

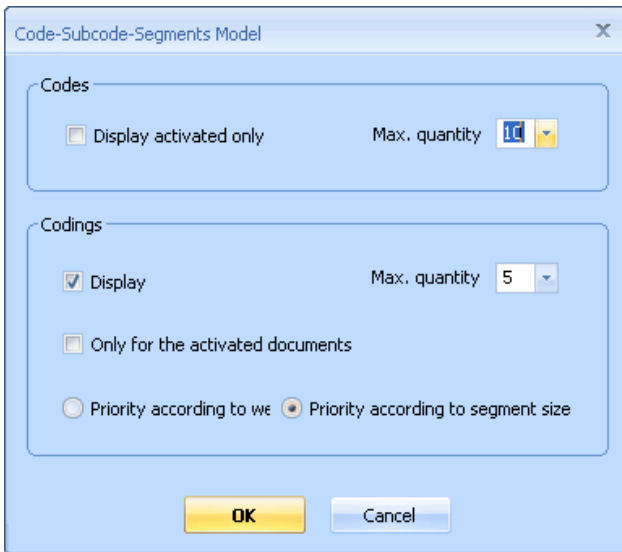
Your selected code is placed in the center of the map with the subcodes arranged in a circle around it and connected to it with lines. All coded segments are then connected to the appropriate code/subcode.

Code-Subcode-Segments Model





Model options in detail



a) Code options

- Subcodes can be limited to those activated in the Code System window. You can also set the maximum number of subcodes to be displayed.

b) Coding options

- Display codings. If this box is checked, codings will be displayed for each of the codes. You can also set the maximum number of codings to be displayed per code.
- You can also limit the codings by choosing to display only those that are found in the documents activated in the Document System.
- If there are more codings than the maximum to display, you have the option of ranking the codings by weight (relevance) or by length (measured in bytes).

In Sync Mode

Code/Subcode icon

- a) Mouse over: shows a preview of the code memo.
- b) Left-click: highlights the code in the Code System window.

Coding icon

- a) Mouse over: shows a preview of the coded segment.
- b) Left-click: highlights the code in the Codes System and the document in the Document System.
- c) Double-click: opens the document in the Document Browser and moves to the coding in the document.
- d) Right-click: opens the context menu where you have the option of displaying the coded segment in its entirety.



5. Intercoder Agreement

5.1. The Intercoder Agreement Problem in Qualitative Research

In qualitative data analysis, one tries to ensure that code usage is as reliable and consistent as possible. As opposed to the standard reliability tests in quantitative research, which evaluate a coefficient that gives a static reliability measurement, reliability in qualitative research depends on the coding. Rather than appraising a coefficient, one attempts to eliminate the code “disagreements”, thereby improving the coded material to be evaluated.

When more than one person has independently coded the same text, the coding from each person should be compared and contrasted, and the differences discussed within the research team. Where there are differences, a decision can be made which variation is better.

5.2. The Concept of Agreement Testing in MAXQDA 10

The Intercoder Agreement function in MAXQDA 10 assumes the following:

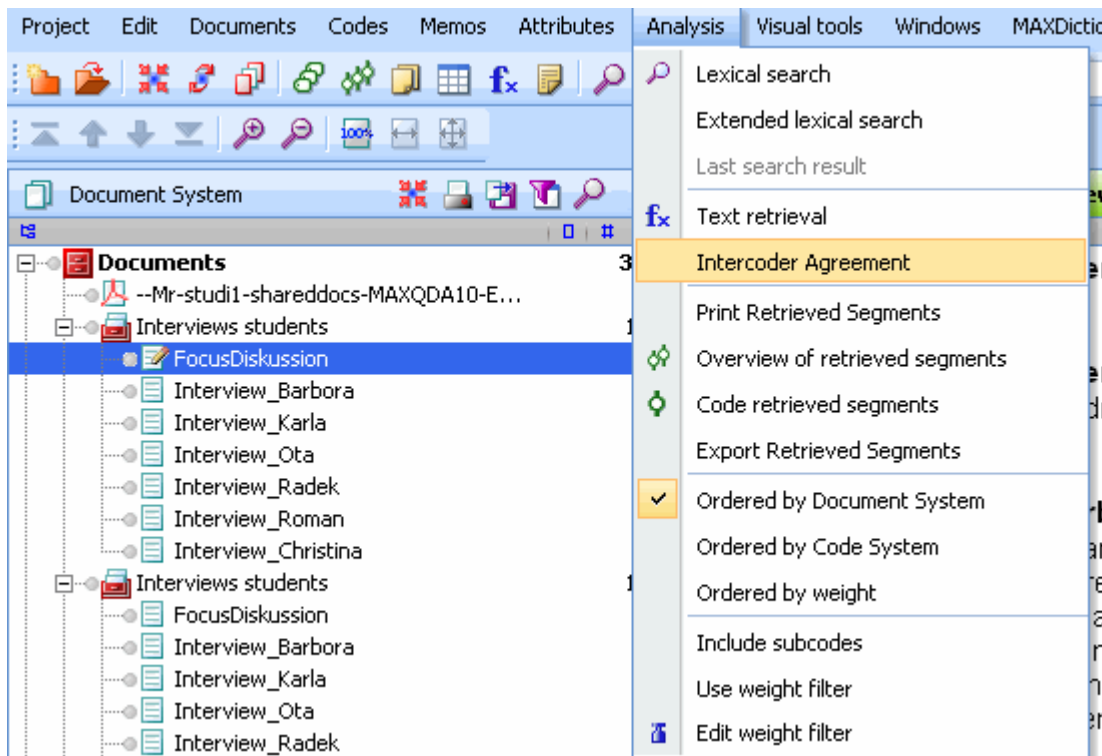
1. Two researchers independently code the identical text using the same set of codes (Code System). It is irrelevant whether the coding is done on the same computer or not. It is only important that each researcher can't see how others have coded the text.
2. The test can only be completed if the texts coded by the two researchers are in the same MAXQDA project. If the coding is done on different computers, they must be merged. This – along with the exchange of codes, memos, and variables – can be done with the MAXQDA teamwork functions.

After following this procedure, it is possible to use the *Intercoder Agreement* function in the *Analysis* drop-down menu to test the agreement between the two researchers' coding of the text. MAXQDA produces a statistical table of the text and text segments. You then have the option to jump from the window to the places in the text where there is a coding disagreement. You can choose which codes are to be included in the test by activating or deactivating them in the Code System.

Step 1) If the Intercoder Agreement test is only to be applied to certain codes, begin by activating them in the Code System.



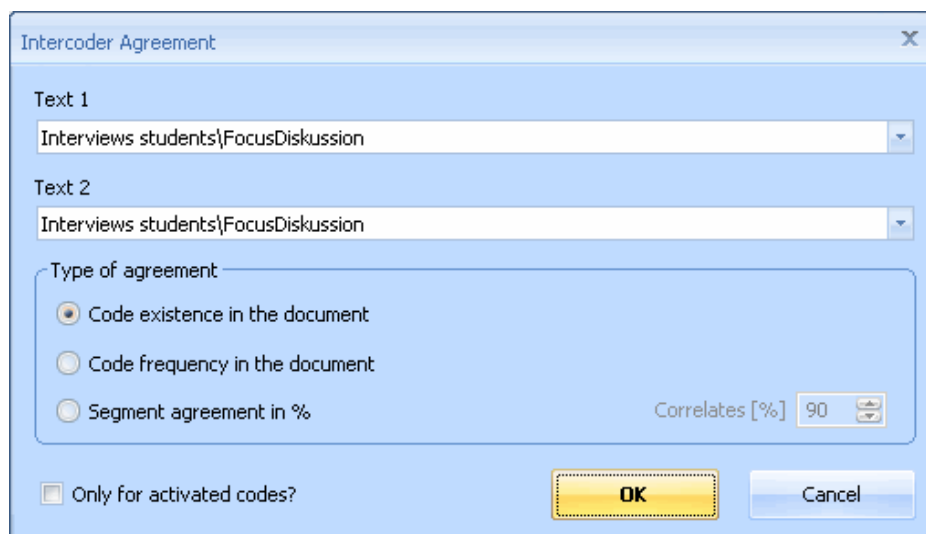
Step 2) Select *Intercoder agreement* from the *Analysis* drop-down menu.



Step 3) Selection of the texts to be compared

The text activated in the Document System will automatically be picked as the first text. In the screenshot above, the document 'FocusDiskussion' is activated and therefore chosen to be the first text in the comparison. You also have the option of simply selecting the document you wish to evaluate from the drop-down menu.

In the second drop-down menu, you can select the text that should be compared to the first.





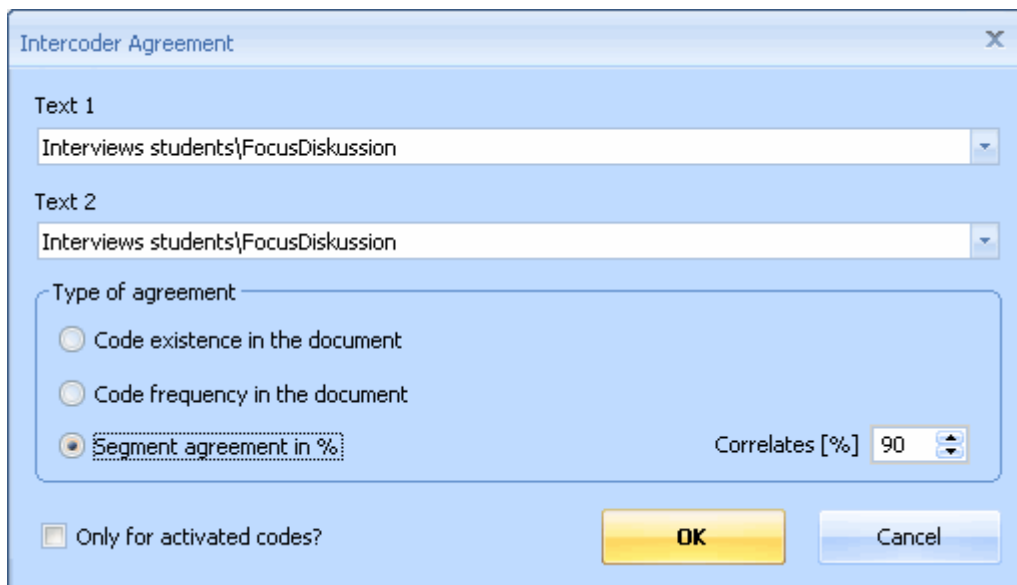
Step 4) If you only want to test the activated codes, check the box at the bottom of the window.

Step 5) You have the option of testing three different types of agreement.

Option 1: Document level – tests whether a code exists in the document or not. This option is especially helpful if you are working with a relatively short document and many codes.

Option 2: Document level – tests the number of times a code is used in the document.

Option 3: Segment level – tests whether the codings agree in individual text segments. This is the standard option for evaluation qualitative coding and displays a percentage, representing the level of agreement. Since documents are often not broken up into sub-sections, the agreement test is done for every text segment coded by either researcher.

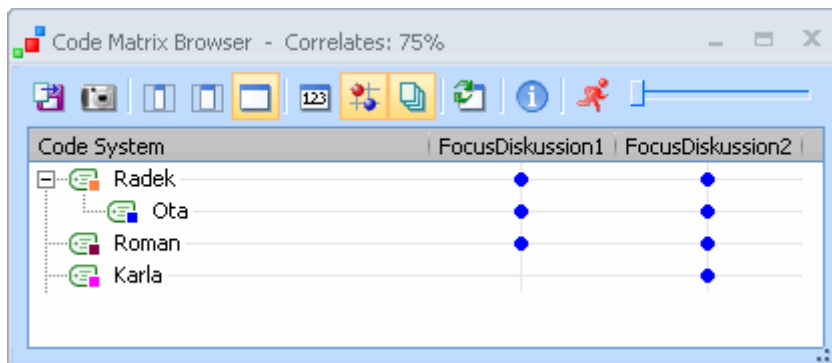


Results of the Intercoder Agreement test

After clicking *OK*, the results will be displayed. The display varies according to the chosen option selected in Step 5.

5.2.1. Results for Option 1:

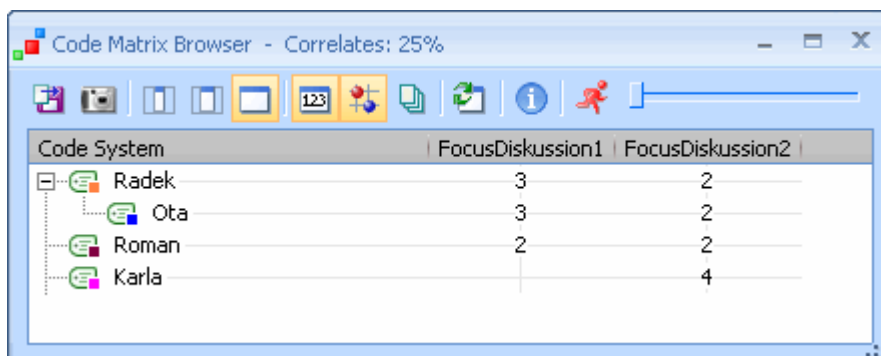
As seen in the screenshot below, the results are displayed in the Code Matrix Browser. Here, each code is displayed as present or not present in the two documents; the presence of the code is represented by a blue circle or square.



Clicking on a symbol in the visualization takes you to the corresponding document, code, or coded document segment. The correlation percentage is also displayed in the window header.

5.2.2. Results for Option 2:

The Code Matrix Browser is used once again to visualize the comparison. Rather than a symbol representing the presence of a code in each text, a number is shown, representing the number of times a code was used in each document.



5.2.3. Results for Option 3:

This is the most complicated option, because the coding agreement is tested at the individual text segment level. If, for example, Text 1 has 12 coded segments and Text2 has 14, 26 tests will be performed. The results table will therefore have 26 rows.

It is necessary to set the range of variation that should still be considered “agreement”. In other words, what percent of the coded segment must also be coded by the other researcher in order for them to be considered in agreement? The default is 90 percent.



Two results tables are produced:

A) The code-specific results table.

Code	Correlates	Doesn't correlate	Total	Percent
♦ Radek	2	3	5	40
♦ Radek\Ota	4	1	5	80
♦ Roman	4	0	4	100
♦ Karla	0	4	4	0
♦ <Total>	10	8	18	55

This table provides an overview of the number of segments that correlate and don't correlate between the two researchers' coding. It shows where the weak points are (in this case, the code 'Karla' needs to be addressed). For each code, the number of correlating codings, non-correlating codings, total codings, and the percent are displayed.

B) Detailed agreement table.

The second table allows you to see exactly where the two researchers did not agree. A red 'x' in the first column means that the agreement percentage (default: 90) was not reached, and the green diamond means that the percentage was reached. By clicking on any of the column headers, you can sort the table according to that column.

You can view the coding in the first document by double-clicking on a square in the document column. Double-clicking on a square in the second document's column will open up that document in a second tab, taking you to that segment, whether it was coded or not. It is then possible to go back and forth between the two tabs to figure out which researcher's coding is more accurate.



Intercooder agreement: results

18 Objects

	Text	Code	Text 1	Text 2	Agree
+	FocusDiskussion1	Radek\Ota	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
✗	FocusDiskussion1	Radek	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
✗	FocusDiskussion1	Radek\Ota	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
+	FocusDiskussion1	Radek\Ota	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
+	FocusDiskussion1	Radek	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
+	FocusDiskussion1	Roman	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
✗	FocusDiskussion1	Radek	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
+	FocusDiskussion1	Roman	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
✗	FocusDiskussion2	Karla	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
+	FocusDiskussion2	Radek\Ota	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
✗	FocusDiskussion2	Karla	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
+	FocusDiskussion2	Radek\Ota	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
✗	FocusDiskussion2	Karla	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
+	FocusDiskussion2	Radek	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
+	FocusDiskussion2	Roman	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
✗	FocusDiskussion2	Karla	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
+	FocusDiskussion2	Roman	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
✗	FocusDiskussion2	Radek	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>