

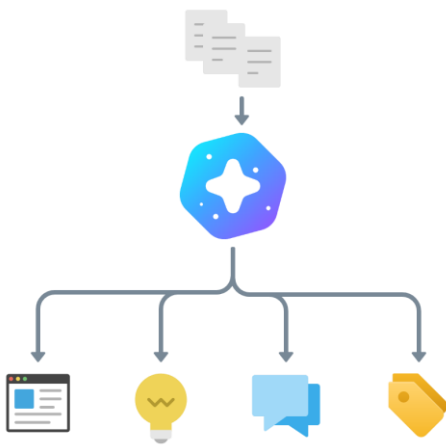
# Code and analyze your data with AI Assist

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## What is AI Assist

AI Assist is an addon to MAXQDA24. It integrates a large language model into the software. In general, large language models generate text based on training data and a prompt. AI Assist uses a more deterministic model which leads to more stable results and less hallucination.

## Function Overview

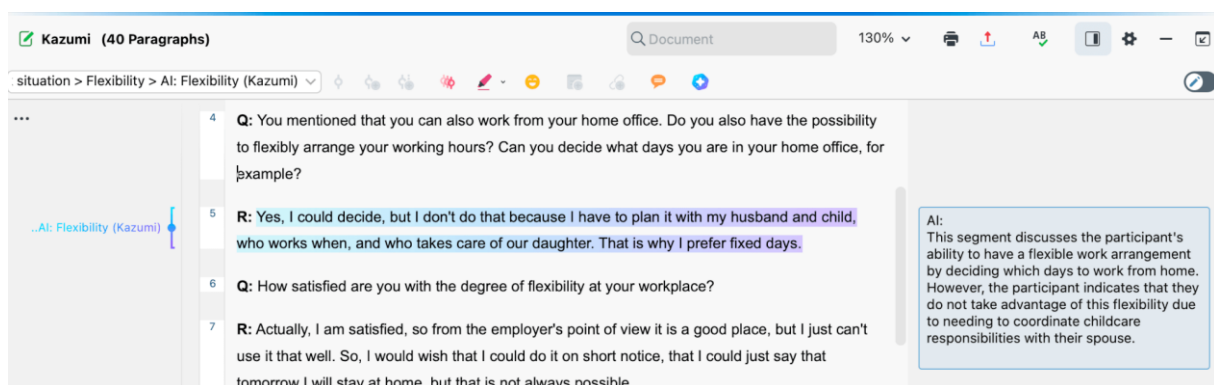


Overall, AI Assist provides for types of different functions:

- Creating summaries of documents, coded segments and more
- Suggesting names for codes or subcodes and providing explanations for unfamiliar terms
- A chat-based interface to analyze codes or documents by the use of prompts
- AI based coding of single documents

## AI Coding

AI Coding is an AI Assist feature designed to facilitate your coding process while giving you complete control over the analytical work. With AI Coding, you can use AI Assist to analyze a single document and receive text segment coding suggestions based on your specific coding criteria. This automated coding approach ensures AI adheres to your analytical perspective.



AI Coding in MAXQDA offers more than just a way to automate a document's initial coding—it can also serve as a powerful tool for enhancing and refining your manual coding process.

Whether coding a document from scratch or reviewing a fully coded project, AI Assist can act as a second set of eyes, helping you cross-check your work, identify any segments you might have missed, and even highlight differences in interpretation.

### A brief overview of the AI Coding workflow

First, users choose the document and the code they want to apply. Then, they provide a clear code definition, including coding inclusion and, if appropriate, exclusion criteria. Then, AI Assist analyzes the document, applies the code to relevant text segments, and explains the coding rationale. Finally, users can review and finalize the AI-suggested segments.

AI Coding works for one document and one code at a time, meaning that every AI Assist coding request can code a single document with a single code. This also means you can only run one AI Coding process at any given moment.

## How to code with AI Assist

### Initial setup and preparation

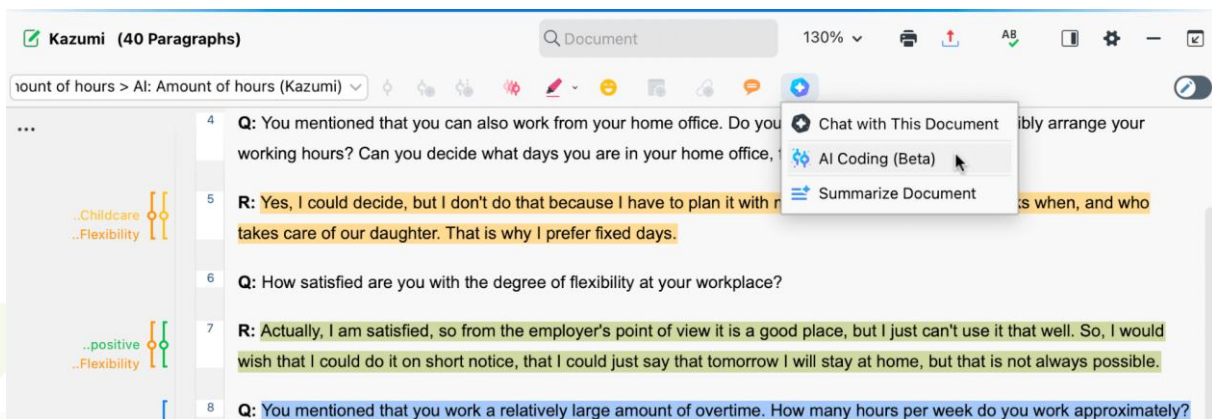
To get started with AI Coding, you will need to have already [created at least one code](#) in the "Code System" window.

If you are working with a PDF document with headers and footers, we suggest removing them from the analysis before applying AI Coding. This will help ensure more accurate coding suggestions. You can find guidance on how to exclude them in our ["Exclude areas from PDF documents"](#) section at the bottom of the manual's chapter on PDFs.

### Start AI Coding

Once you have a code, you can initiate the process by navigating to:

- **The "Document Browser" toolbar**
  1. Open a document (text or PDF) and ensure you are viewing it in the ["Document Browser"](#) window.
  2. Click the **AI Assist icon** in the toolbar.
  3. Select **AI Coding** from the dropdown menu for the AI Coding dialog to appear.
  4. Drag and drop a code from the "Code System" into the respective field in the AI Coding dialog.



AI Assist: AI Coding option in the 'Document Browser'

- **The code's context menu:**

1. Right-click on the code in the "[Code System](#)" window.
2. Select **AI Assist > AI Coding** for the AI Coding dialog to appear.
3. Drag and drop a document (text or PDF) from the "Document System" into the respective field in the AI Coding dialog.

- **A document's context menu:**

1. Right-click on a document (text or PDF) in the "[Document System](#)" window.
2. Select **AI Assist > AI Coding** for the AI Coding dialog to appear
3. Drag and drop a code from the "Code System" into the respective field in the AI Coding dialog

### **Provide a clear code definition in the code memo**

You can also find a code memo field in the AI Coding dialog (once you add a code). Code memos are crucial to outline a code's intent, define it, and explain when it should be applied.

This is particularly important in AI Coding with MAXQDA since the code memo guides AI Assist in understanding your coding intent. Without a detailed memo, AI Assist may misinterpret your intent, leading to less optimal results. A well-defined code memo is key to improving AI's accuracy in identifying relevant segments.

AI Coding (Beta)

Creates coding suggestion for the selected document.

**Document**

Kazumi

**Code**

Typical workday

**Code Memo**

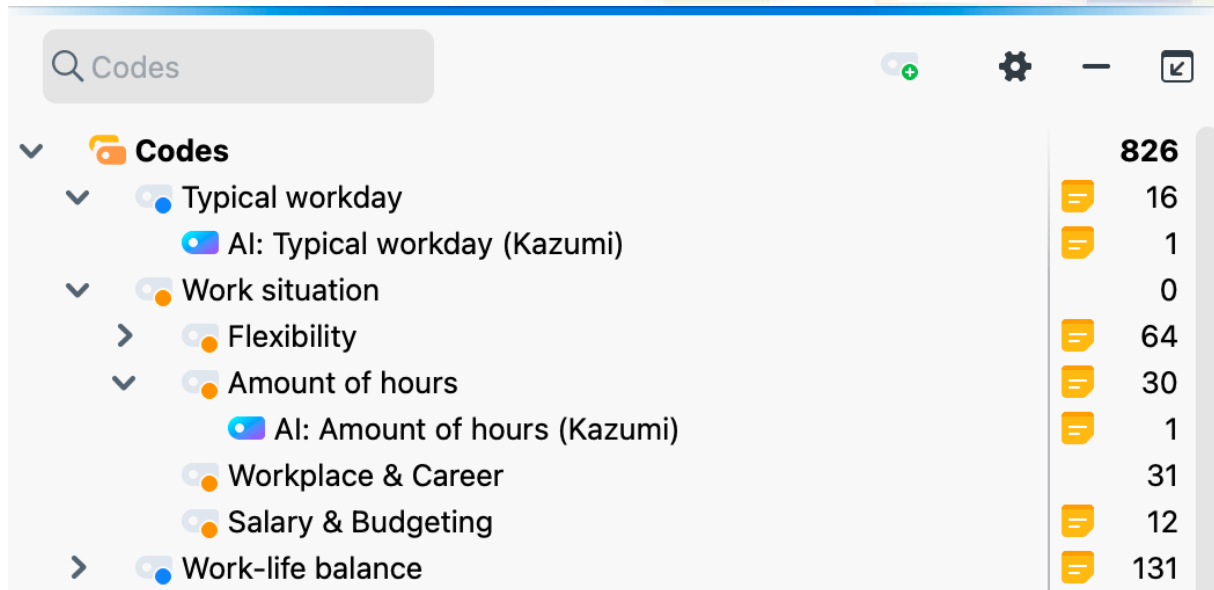
Your code memo should define which text passages should be coded with this code. You can also specify which passages to ignore.

**Code Definition**  
Codes statements where interviewees describe a typical workday.

**Inclusion and exclusion criteria**  
Only contains the description of an actual workday, not wishes or suggestions.

**i** OK Cancel

After you click **OK**, AI Assist analyzes your document, identifies relevant segments based on the code definition, and generates a new subcode that nests under the original code.



AI-generated subcodes are distinguishable by their unique colors and naming conventions, making it easy to differentiate them from manually applied ones.

Once completed, MAXQDA will automatically navigate to the first coded segment in your document, and you can start reviewing the coding suggestions.

## Coding Multiple Documents

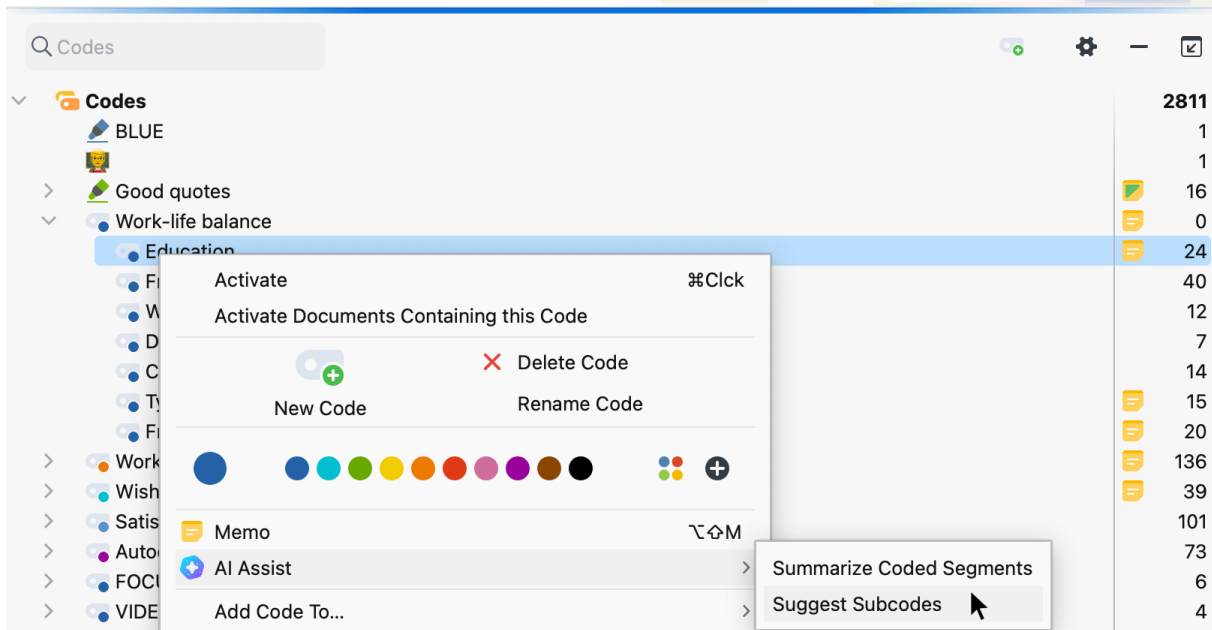
To code multiple documents, apply the same code with the same code definition to each document. Afterwards, merge all AI Codes into one:

The screenshot displays the MAXQDA interface. On the left, a 'Codes' panel lists various categories with their respective counts: Health Impact (1), Negotiating Power (23), Flexibility (11), Health (15), and AI-generated codes (7). The 'Health' category is expanded, showing sub-codes like 'AI: Health (IN004\_Fiona)'. A document view in the center shows a segment with the code '..AI: Health (IN003\_'. A context menu is open over this segment, providing options: 'Activate' (with a keyboard icon and 'Click'), 'Activate Documents Containing these Codes Incl. Subcodes', 'Delete Codes' (with a red 'X' icon), a color selection tool, 'Add Code To...' (with a right arrow), 'Merge Codes', 'Linked Memos' (with a memo icon), and 'Transform Code Frequencies into Document Variable'. A snippet of text from the document is visible on the right: 'a certain statu... necessary to... concerned, I c... risk for me. In... myself as well... comes to reor...'. The bottom right corner of the document view shows the text 'someone got'.

You can then quality check the AI coded segments. If you like, you may move the AI generated codes into your already existing codes.

## Suggest new Codes

Using AI Assist, you can also automatically create an inspiring list of possible new codes for a highlighted section of text. You can assess if the suggestions are useful for your analysis tasks, choose appropriate codes, and then MAXDQA will apply them to the text section.



To get suggestions for new codes:


1. Select a text passage in the “Document Browser” and right-click on the selection.
2. In the context menu, select **AI Assist > Suggest New Codes for Text Selection**.
3. In the dialog that appears, specify the desired language for the suggestions and confirm with **OK**. The language selected for the suggestions may be different from the language of the coded segments; the coded segments may also vary in language.
4. MAXQDA will present a list of possible new codes. Select all suitable codes and confirm again with **OK**.



AI Assist: Suggest New Codes

AI Assist has generated a list of code suggestions. Please choose any codes that you want to apply to the text. The detailed explanations will be added in the accompanying code memo.

Code	Explanation
<b>Thematic codes</b>	
<input type="checkbox"/> <b>Time management</b>	Discussing the arrangement of appointments and allocation of time.
<input checked="" type="checkbox"/> <b>Work-life balance</b>	Desiring more time for family and personal activities.
<input checked="" type="checkbox"/> <b>External appointments</b>	Referring to appointments outside of the office.
<input type="checkbox"/> <b>Internal appointments</b>	Referring to appointments within the office.
<b>Thematic codes (alternative)</b>	
<input checked="" type="checkbox"/> <b>Scheduling preferences</b>	Describing the desire to separate external and internal appointments.
<input checked="" type="checkbox"/> <b>Time allocation</b>	Discussing the need to reduce outside appointments for better time management.
<input type="checkbox"/> <b>Family time</b>	Expressing the importance of having more time for family.
<input checked="" type="checkbox"/> <b>Personal time</b>	Desiring more time for oneself.
<b>Interpretative codes</b>	
<input type="checkbox"/> <b>Prioritizing family</b>	Valuing family time and seeking a better work-life balance.
<input type="checkbox"/> <b>Efficiency and productivity</b>	Recognizing the need to manage time effectively for better outcomes.
<input type="checkbox"/> <b>Boundaries and structure</b>	Desiring a clear separation between work and personal life.
<input type="checkbox"/> <b>Well-being and self-care</b>	Recognizing the importance of having time for oneself.

 OK Cancel

MAXQDA creates all selected codes at the top of the code system and assigns them to the selected text passage. The explanations are saved in the respective code memos. Please note that in some cases there is no explanation; then no code memo is created.

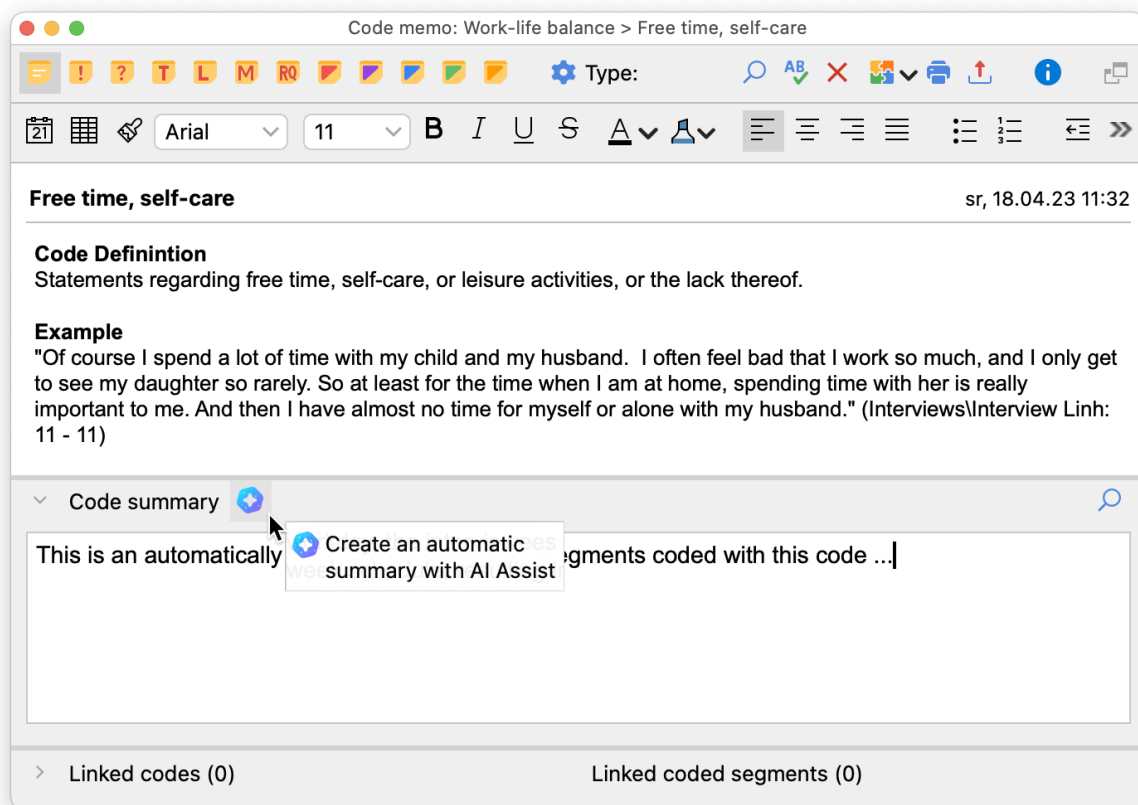
Typically, MAXQDA will present three separate sets of suggestions: the first two sets contain thematic codes, where the codes in the second tend to be more general. The third set contains codes that usually express more interpretation. You're free to pick as many codes as you want from any of these groups.

You can use these created codes and their explanation, to code further documents in your data using AI Coding.

## Summarizing a Code

In MAXQDA's Code Memos there is a "Code Summary" area where you can write a summary for the segments that were coded with the respective code. This provides a perfect location where you can aggregate key content captured by a code.

Using AI Assist, you can create a Code Summary for the coded segments automatically and then edit the summary if necessary.

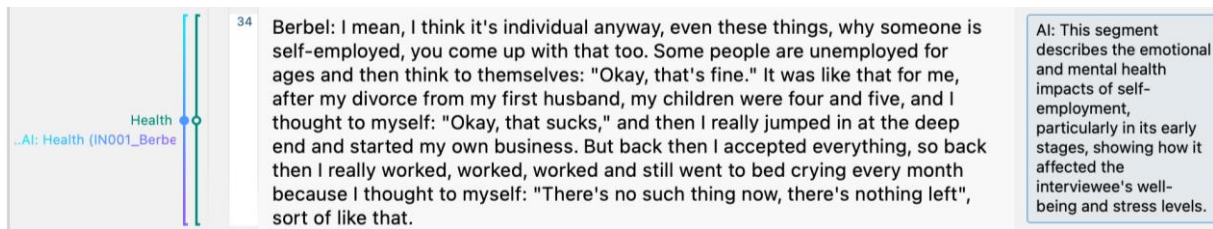


With AI Assist you can automatically create a Code Summary in the code memo window. You can also create such a summary for an AI Coded code. Which will provide you with a quick overview of the coded data.

## Compare AI codes to your own codes

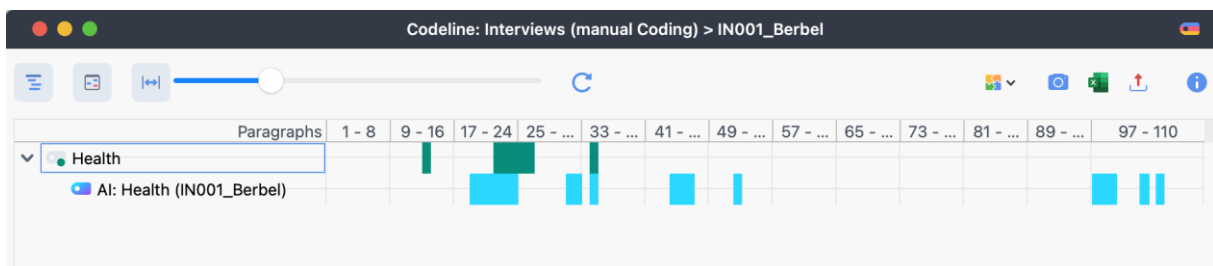
If you have already coded your data, you can use AI Coding to check if you have missed out on any important segments in your data. For this, apply AI coding to an already coded document.

You can use the document browser to revisit the document and compare your own coded segments to the coded segments created by the AI:



The screenshot shows a document browser interface. On the left, a vertical timeline indicates the position of a segment. The main text area contains a paragraph starting with "Berbel: I mean, I think it's individual anyway...". To the right of the text, a grey box contains an AI-generated description: "AI: This segment describes the emotional and mental health impacts of self-employment, particularly in its early stages, showing how it affected the interviewee's well-being and stress levels."

You can also use MAXQDA's powerful visual tools for a visual comparison between AI created codes and your own. For example, the Code Line is very useful for this purpose:



Here, the first row shows the manually created code “Health” by the researcher. The second row shows the AI generated codes. Although there is some overlap, there are several segments at the end of the interview that the AI flagged as important, but the researcher did not code it.

## Recommended reading:

Müller, A. & Rädiker, S. (2024). “Chatting” With Your Data: 10 Prompts for Analyzing Interviews With MAXQDA’s AI Assist. MAXQDA Research Blog.

<https://www.maxqda.com/blogpost/chatting-with-your-data-10-prompts-for-analyzing-interviews-with-maxqda-ai-assist>

Rädiker, Stefan et.al (2024): AI in Research: Opportunities and Challenges. (2024, February 29). [Symposium]. MAXQDA International Conference (MQIC), Berlin, Germany. <https://www.maxqda.com/blogpost/ai-in-research-opportunities-and-challenges>

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### Contact your trainer

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