Introduction to MaxQDA for Qualitative Data Analysis

Objective:

By the time we are finished you will know how to import and analyze data using MaxQDA.

Background:

We are going to use a sample project which looks at environmental change in coastal communities called "Environmental Change down East." This example came from an NVivo example project. We are using the same data in our qualitative software workshop series so participants can easily compare the leading qualitative data analysis software packages

Respondents were asked 6 overarching questions/topics.

We will focus on *reasons for decline in the fishing industry down east*.

1. Download the MaxQDA workshop files from here:
2. Unzip the file on your local computer. It unzips into a *MaxQDAProject* folder with our workshop files. Take note of its location on your computer. This will be our project folder for the workshop.
3. Click *Start>MaxQDA2022*
4. Familiarize yourself with the options on the welcome interface
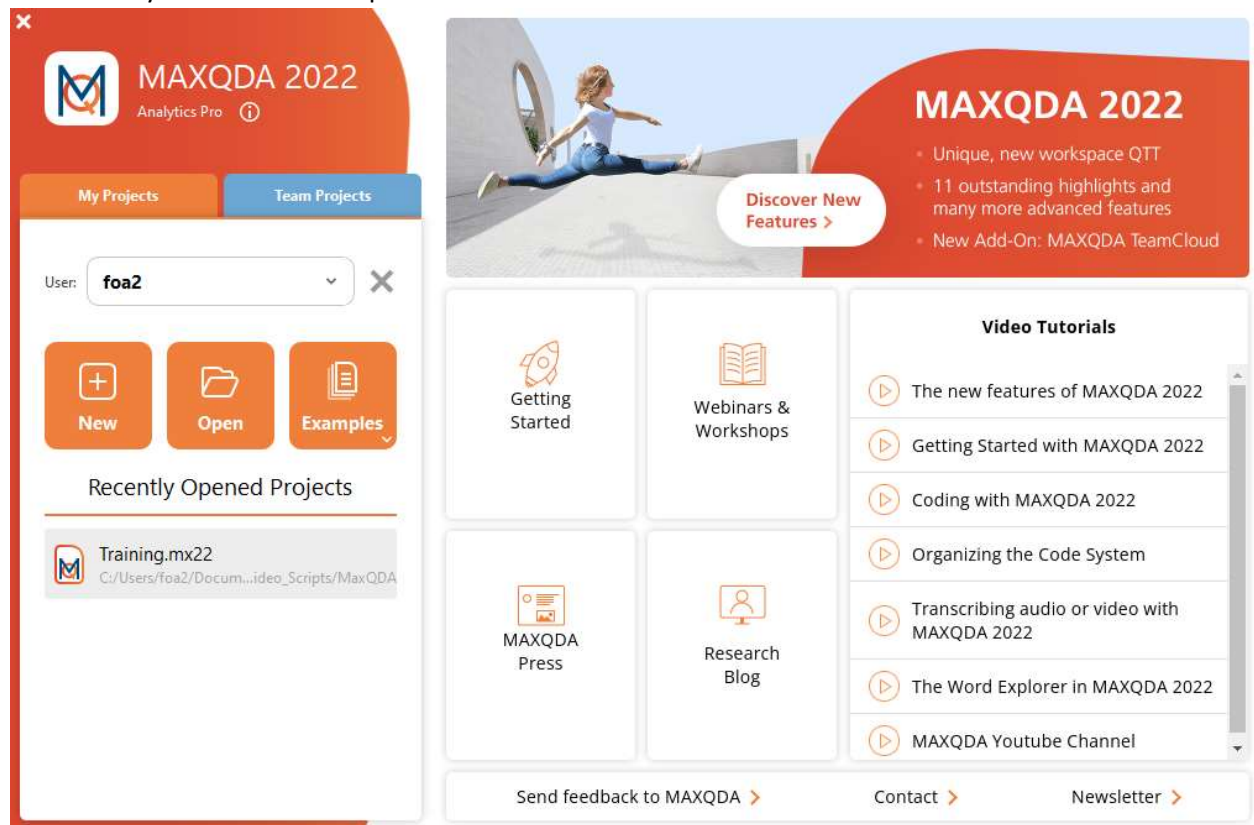
5. Choose *New*, name it *Training.*

6. Click *Save.*
7. Familiarize yourself with the Ribbon, Document System, Code System, Document Browser, and Retrieved segments.
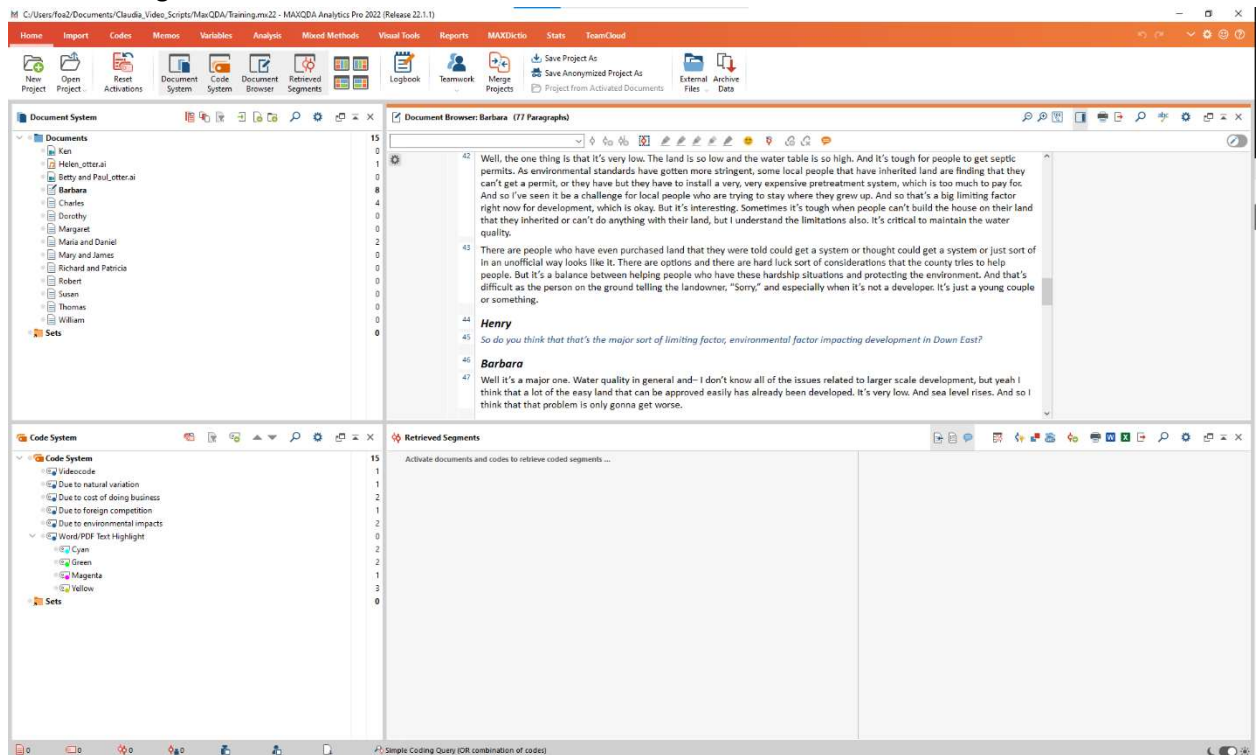
8. Add files – click *Import> Texts, PDFs, Tables>*Go to the *MaxQDAProject* folder, select all Word files **except** Barbara, Charles, Maria and Daniel, then click *Open*
9. View file content – Double-click on file (Patricia and Richard). This displays the transcript content.
10. Familiarize with structure of the interview and format of transcript
11. **Coding** is the process of gathering materials by topic, theme, or case. For example: You go through each document and select passages of text, clips of video or audio files that talk about decline in the fishing industry due to environmental impacts and coding (or tagging) each passage as due to environmental impacts.   You can then gather all the passages with that code so you can look for emerging patterns and ideas.

Types of coding
a) Open Coding, in-vivo coding, Code with existing code
b) Emoticoding
c) Color Coding

12. Open *Patricia and Richard's* interview transcript: Scroll down to Q4 and locate the highlighted passages and follow the coding method below:

Henry

Can you explain that?

Patricia

Because, if that had not happened the people here would have sold this property to every Tom, Dick , and Harry from off, as they say. And they would have gotten the sewer system through here probably. People with money and influence and its going to happen, I mean we know it's going to happen, if the economy ever bounces back. Cedar Island will be different than it is today, and I am all for development. I do think it should be regulated, so that we can preserve as much of our heritage as we can. Now we do know with development you do lose a lot of your heritage. Harkers Island is a prime example of that. Development is progress, and we need jobs Down East. The commercial fishermen's way of life has diminished so much and it's not all because the resource is not there. It's a lot because they're overregulated.

Richard

And fuel

Patricia

Yes and fuel prices have hurt the commercial fishermen, but that has just occurred in the last couple three years. Marine Fisheries is good, but Marine Fisheries goes too far sometimes and the people here are hard working proud people. They like to, and all of Down East, they like to be self sufficient, they don't like to be on any kind of welfare, and I'm sure there's some that has to now, but the people down here like to be on their own. We do want our way of life preserved, we do want progress, we do want development. The big development that was supposed to be started over around Snug Harbor, that would be nice for Down East—the marina and all that stuff. As long as it's regulated, the waters are protected, I think the majority of people of Down East are for it, but we do want it regulated properly.

    i.   Code all Teal highlighted passages as *Due to regulations*

        Coding Method 1: Highlight passage>right-click>*With New Code>* Name the code *Due to regulations,* then click *OK.*

        Note the following:

            a.   Options: Color, Code Memo, Comment on the coded segment, and Additional code
            b.   Code System panel: *Due to regulations* now listed.

Coding Method 2: Highlight the other passage that needs to be coded as *Due to regulations*. Then drag-and-drop into the *Due to regulations* code in the Code System panel.

13. Open ***Susan's*** Interview transcript: Scroll down to Q4 and locate the highlighted passage and follow the coding method below:

Nancy

Can you talk a little bit about if you think local fisheries have changed, and if so how they've changed?

Susan

Commercial fishing is totally – culturally, historically, and economically was the backbone of Down East. And on Harkers Island there was 7 or 8 fish houses and probably the same number of scallop houses. The whole front of the island, which is the south side, along the channel is where they moored their big boats, and up close is their skiffs. The whole dynamic was along that shore because everyone depended on the water at least part time. A lot of people went to work at Cherry Point in the 50s and 60s. That's where my daddy went. But they were still fishermen. If there was a lot of fish that fall they'd quit Cherry Point for two or three months and go fish and then they'd go back in January. So they wanted to be fishermen whether they were or not. And it was the same way in Atlantic…

Because of water quality issues and because of regulations – most fishermen would tell you that regulation is what is really killing them – but that's not really apart from environmental regulations. A lot of the fish stocks are down… There is also the import issue. I wish it was against the law for, specifically Carteret County, Dare County, these coastal counties to buy imported seafood. That's almost sacrilegious. But I know the economics of it. Restaurants need to stay in business. It's a cheaper product and the public doesn't know the difference. So hopefully with projects like Carteret Catch, Brunswick Catch, and Dare County is doing a project. A lot of it is education. And I think when people know the difference and they realize that their decisions are impacting local communities and local families they will make the right decisions….

Coding Method 3: Highlight passage>Go to the document toolbar>select Code with a new code> name it *Due to water quality decline,* then click *OK*.

14. Import Barbara, Charles, and Maria and Daniel's transcripts

   Open **Barbara's** transcript. Scroll down to Q4 and locate the highlighted passages and follow the coding method below.:

Q.4. Community and Environmental Change

Henry

Talk about changes that you've seen in this area.

Barbara

The biggest change that I'm aware of is the sense – I think that now there's the sense the commercial fishing as a livelihood is dying as a viable option. And I know – I think that that is a change since 30 years or 35 years ago. I don't remember that being sort of this sense of doom. For me that's the most profound. That's a huge thing that I think is very sad. And that has to do with – that's such a complex situation -- the water quality and also the overharvesting and tearing up of the bottom – all these different things that are factors.

Imported seafood is so much cheaper. And the little sea-side restaurants around here don't sell local shrimp on their shrimp burgers. The fancy restaurants have local seafood. Even if the stocks are fine, it's that you can't make a living spending backbreaking work getting paid – earning nothing, very little.

Henry

Yeah. So it's a combination of environmental factors and market forces?

Barbara

Or pressure on water quality and market forces. And then also the complicated relationship between the methods of trawling or methods that destroy habitat– just several factors. A lot of fishermen work on dredges and they go off to other jobs. It might be there would be less and less seafood for us. The fish houses have largely closed; there used to be quite a few more fish houses and places to sell the seafood that you would catch.

    i. All Yellow highlighted passages rename as *Due to environmental impacts of fishing*

    ii. All Bright-Green highlighted passages rename as *Due to foreign competition*

    iii. All Turquoise highlighted passages rename as *Due to cost of doing business*

> To rename a code, right-click on the code in the Code System panel, then click Rename Code, then enter the new name.
>
> Or, lightly tap (single-click) the code in the Code System Panel, this puts the name in edit mode, then enter the new name

15. Open **Charles'** transcript: Scroll down to Q4 and locate the highlighted passages and follow the coding method below.

Q.4. Community and environmental change

Linda

So you mentioned fishing and what do you think about the fisheries here? What kind of state are they in, what's their future, what's their – what's the trajectory here for fisheries?

Charles

Well, your first question is what shape they're in and that's not good. And I don't think anybody knows really the reason why. I think it's a number of factors, probably the fish go in cycles and sometimes there's an abundance of fish and we're unfortunately in a downturn. Now is that just because it's a cyclical thing of nature? Or do we have – I mean we got the Neuse River right here behind us which is the cesspool for Raleigh and Durham and Kinston and all these other communities that use that to dump their waste. You know, what effect does that have on the fish population?

You know you got the Pamlico River which is not quite as impacted because there's not the size communities that are on it but it's gotta have some effect. But clearly the fisheries is in bad shape now. The price of fuel is high, although not as high as it was last year thankfully, but these guys are getting paid the equivalent of what they were making 30 years ago and I don't know many people who could go back 30 years and have that as a wage and survive in today's economy.

    i. All Pink highlighted passages rename as *Due to natural variation*
    ii. All Turquoise highlighted passages now coded as *Due to cost of doing business*

16. Open ***Maria and Daniel's*** interview transcript: Scroll down to Q4 and locate the highlighted passages and follow the coding method below.:

Elizabeth

A lot of people associate, I think, Down East with the fisheries as well. Have you noticed any change in the local fisheries?

Daniel

You count the fish houses. There's no fish houses left. There's one here. The last one's closed on Harkers Island, that I know of. I think there's one at Atlantic. <mark>The industry, like the building industry, is about gone, and whether that's from overfishing, pollution, I can't tell you.</mark> But these guys that I know that commercial fish, that do it for a living – you can think we make 80 and 90 hours a week here at the store – I don't know how many hours they make, and they're hard hours.

<mark>I think the biggest thing is the imports. The imports is killing 'em. All these foreign countries now are growing shrimp and they're bringing 'em in.</mark>

Q.5. Vision for the future of Down East

Elizabeth

So what is your vision for the future of Down East? What direction do you think it's gonna take, or is it – do you think they're pretty much gonna stay the same?

    i.   All Yellow highlighted passages now coded as *Due to environmental impacts*
    ii. All Bright-Green highlighted passages now coded as *Due to foreign competition*

17. **Creating Free Codes**

   Coding Method 6: Go to the *Code System panel*>select *New Code* > name the code*,* then click OK.

   Coding Method 7: Go to the *Codes Menu*>select *New Code* > name the code, then click OK.

18. **Saving project**
    a. MAXQDA does not have a "save" button. Once an action is performed, it's immediately saved. It's also why MAXQDA double-checks before deleting important project elements, such as codes.
    b. Documents and memos that are currently being edited, for example when you are writing notes in a text document or transcribing audio/video files, are automatically saved every 5 minutes. This time interval can be adjusted in the project settings. Open maps in MAXMAps are automatically saved every minute and also when they are closed. Logbook entries are saved when you close the logbook window.

19. **Project file backups**

   a. It is strongly recommended that you regularly create project backups and save them on external hard drives or flash drives, in order to minimize losses in case of computer problems. Backup files shouldn't be stored in the same location as your computer.

   b. MAXQDA 2022 project files have the extension MX2022 – if the file extensions are hidden in your computer system, you can recognize the files by the MAXQDA icon and the file type "MAXQDA 2020 Project File".

   c. You can transfer your MAXQDA project files to an external storage drive using Windows Explorer or Mac Finder. Alternatively, open the file in MAXQDA and choose **Home > Save Project As** in the top menu. Then specify a location and file name and click **OK**.

   d. MAXQDA allows you to backup projects automatically. If you open a project that has not been backed up by MAXQDA for more than a day, MAXQDA will save a copy in a selected folder. MAXQDA automatically provides the backup file with a date and time stamp.

   e. Both the time interval after which a project should be automatically saved and the directory for backup copies can be specified in the MAXQDA preferences. Open these preference by clicking on the gear symbol in the upper right corner of the MAXQDA window ⚙. There, you can also disable the function entirely.
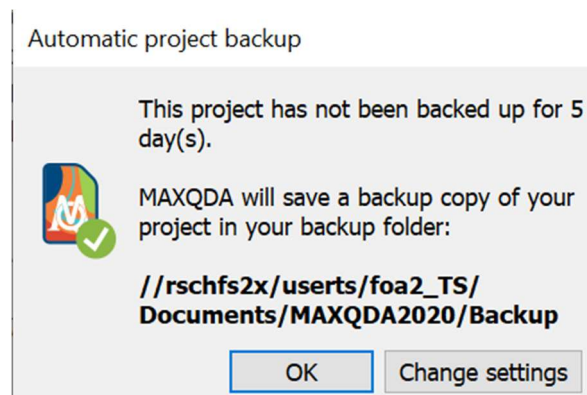
20. **View retrieved segments** – Activate documents and codes to retrieve coded segments.

   In the Codes System panel, click on the code icon next to *Due to environmental impacts to activate the code*

   In the Document System panel, click on the document icon next to the *Barbara* transcript to activate the document.

   This will open the coded segments in the Retrieved Segments panel.

   Familiarize yourself with the tools in the Retrieved Segments panel.

21. Working with Audio recordings or video footage

Editing audio or video files - Do the video or audio editing outside MaxQDA using an editing software BEFORE adding it to MaxQDA.

Audio and video files are generally not imported directly into a MAXQDA project. Instead, they are stored in the MAXQDA Externals folder and linked to a text document in which you can, if necessary, save a transcript.

Click Import>Videos:

- Select *Betty and Paul*
- And associate its transcript – Betty and Paul_otter.ai

  In the "Document System", you will recognize a text document with the associated media file by their special symbols: a musical note 🎵 for audio files and a video camera 🎥 for video files. This file is empty if the audio/video file you imported did not have a corresponding transcript. But, you can transcribe in this empty file.

  Note: If the association between the video/audio and its corresponding transcript did not work, in the Document System right-click on the transcript and select Link Audio/Video file, and insert time stamps automatically if transcript has time stamp, and click OK.

- Open the transcript and click on the audio/video icon to view
- Click *Play* or drag slider up to the beginning of the selected clip, then hit *Start of clip selection*
- Let it play until the end of the selected clip, then hit *End of clip selection*
- Right-click on the selected clip, then code it

To code audio files:
- Process is the same as in video files. Try it with the *Helen* file.

22. Explore and Autocode data
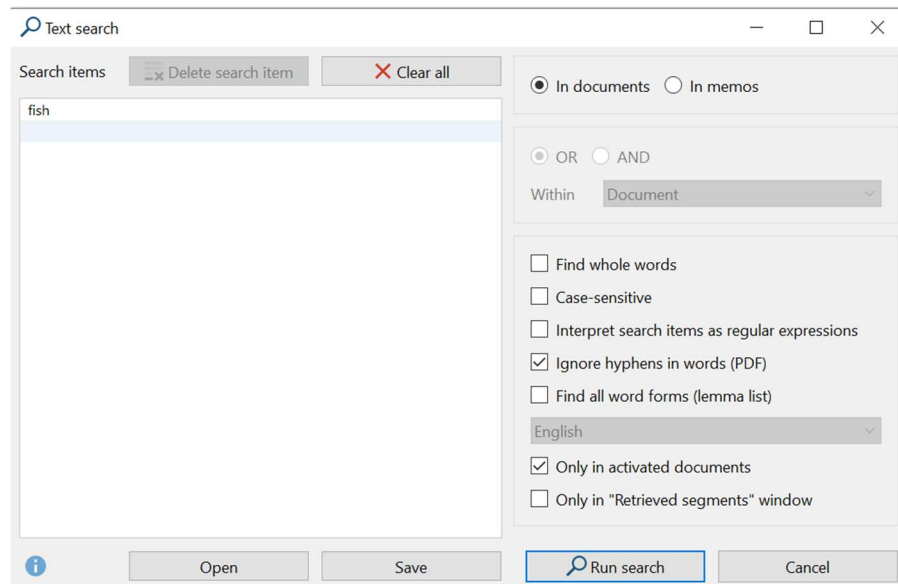
a. **Text Search & Autocode** (find occurrence of a word, phrase, or concept)

Click *Analysis>Text Search & Autocode>Text Search & Autocode*
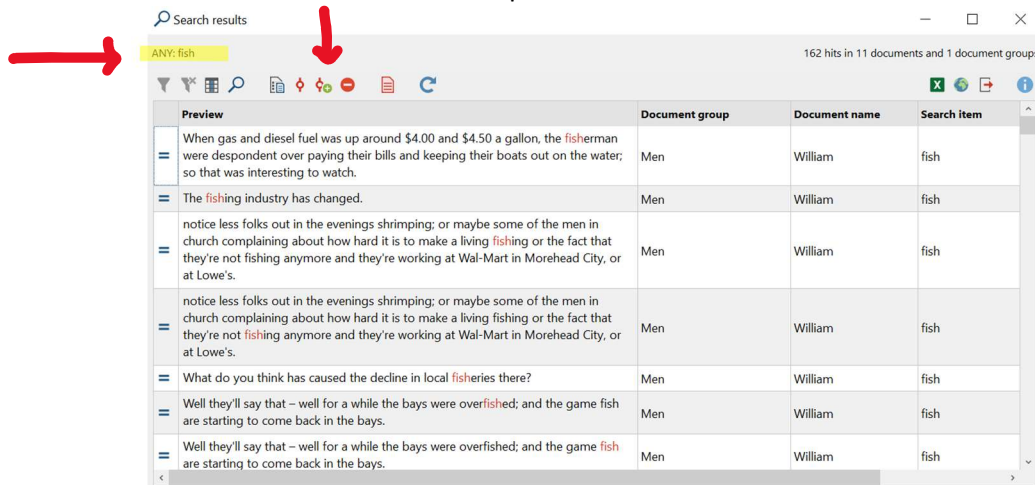
Enter *fish* in the *New entry* box

Leave the rest of the settings as is

Run search

A Search results window will open with all occurrences of fish.

Familiarize yourself with the tools in the Search results window.

Click Columns, and check only Preview and Document Name
Click on the Excel spreadsheet to export the results to Excel

Click on *Autocode Search Results with a new code*, accept default name, click OK, then select Paragraph under "Text and table documents"

Another option is to click on *Autocode Search Results* then select from the existing list of codes (at least one existing code must be activated)

b. Extended Lexical Search

To search for keywords within a certain context, for example both fish and place within one paragraph

Let's search for the words **fish AND place Within 1 Paragraph**

Click on the *Documents* folder to activate all documents

Activate *Autocode – ANY: fish*

Click ***Analysis>Text Search & Autocode>Extended Text Search***

Enter *fish place* in the "Include all these search items" box

Select *"In activated documents"*

Within 1 paragraph

Click *Run Search*
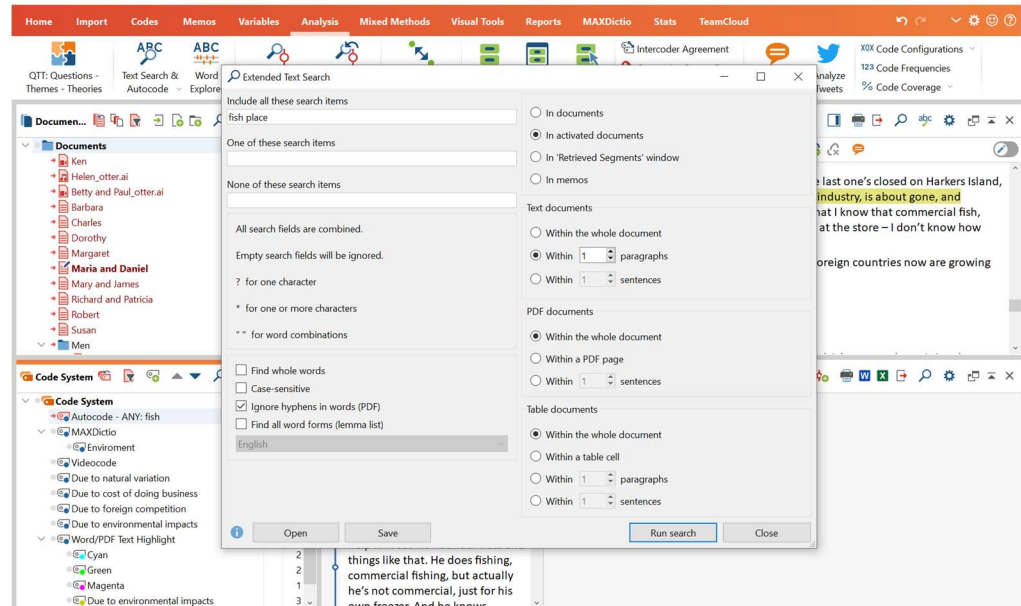
c. Coding Query. Facilitates retrieval of coded segments.

Activate selected documents

Activate selected Codes

Click *Analysis>Complex Coding Query>Coding Query>Start*

Click *Analysis>Complex Coding Query>Complex Coding Query*

fish

fish and place

Notice the query is working already --check the Segments found section

Then hit *Start* to display Retrieved Segments
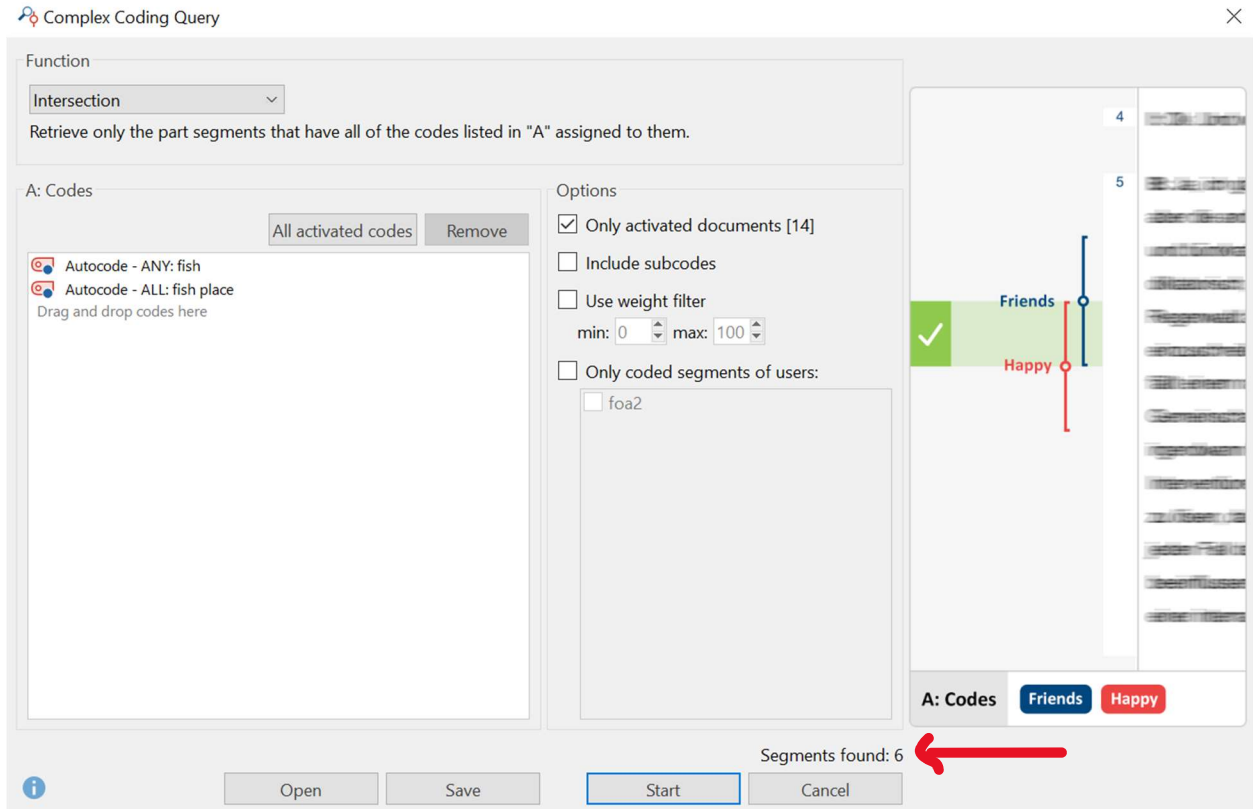
d. **Comparing Documents and Codes** – Compare Cases and Groups can be used to compare the coded segments for different cases and groups. Codes are listed in the rows of the matrix and cases or groups in the columns.
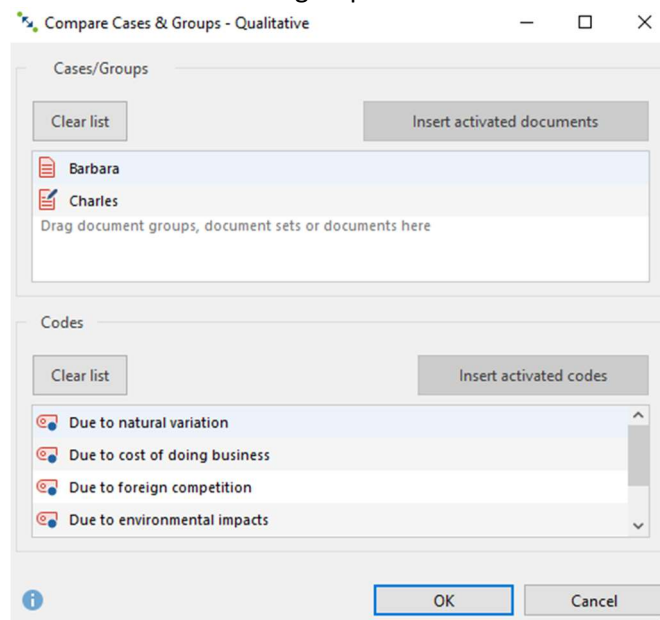
Activate selected documents

Activate selected Codes

Click Analysis>Compare Cases and Groups>Qualitative

      Click *Insert activated documents*

      Click *Insert activated codes*

      Click *OK*

      In the Interactive Quote Matrix output, click on a code and observe what happens

Now, try Quantitative (Crosstabs):

Click Analysis>Compare>Quantitative

      Click *Insert activated documents*

      Click *Insert activated codes*

      Click *OK*

      You will get a crosstabulation showing number of codes per document.

      Familiarize yourself with the tools in the Crosstab output

23. **Working with MaxDictio**

Available only in MaxQDA Plus and MaxQDA Analytics Pro

Can be used to:
i)   perform vocabulary analysis, e.g., word frequencies
ii)   examine the occurrence of words and combinations of words in their respective
        contexts
iii)   quantitative content analysis using a dictionary, and graphically display results

On the main menu, click *MAXDictio*

a)   Word>Word Frequencies
b)   Keyword-in-context
            Example: fish (check the boxes: *case sensitive* and *find whole words*)
            Context: display 5 words before and 5 words after fish)
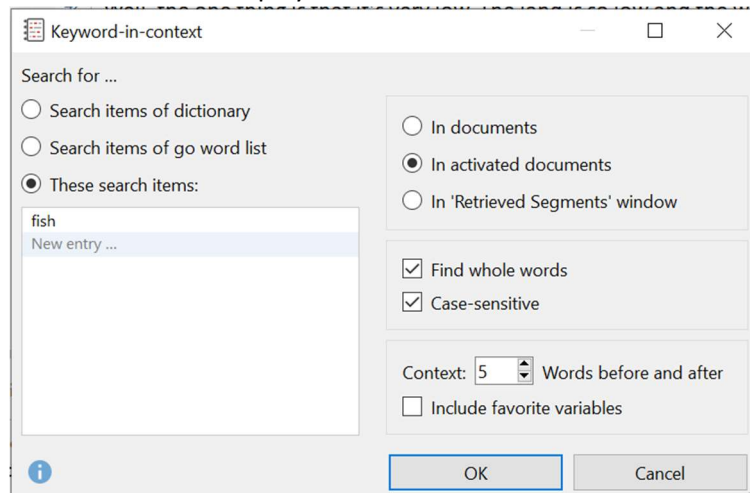
c)   Word Combinations – finds frequency of combination of words meeting the conditions set.
     Captures common phrase (default 3 words)

d) Interactive Word Tree – allows you to explore and analyze visually words and word combinations in their respective contexts.
   a. Select activated documents, then hit OK

b.   Change the word in the textbox to "water"
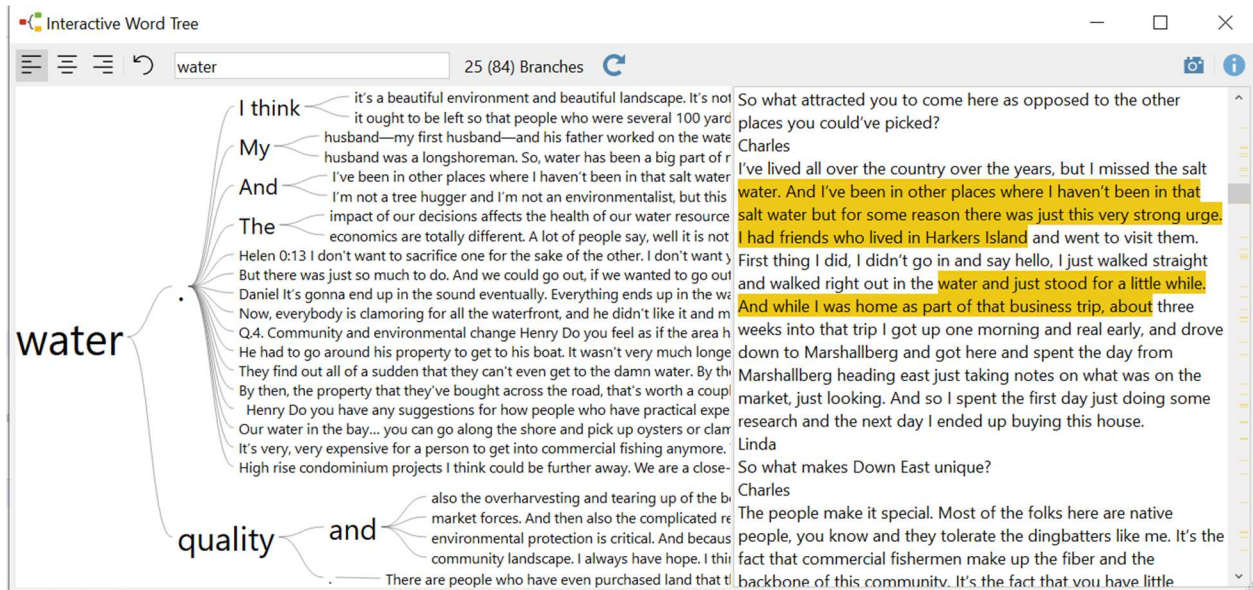
e)   Word Matrix Browser – visualizes in matrix form how frequently words occur in documents. One row is displayed for each word or dictionary category searched. While columns columns are formed by documents, document groups, or document sets.
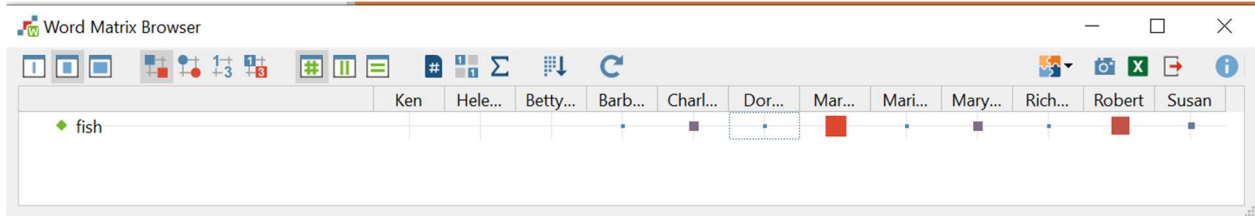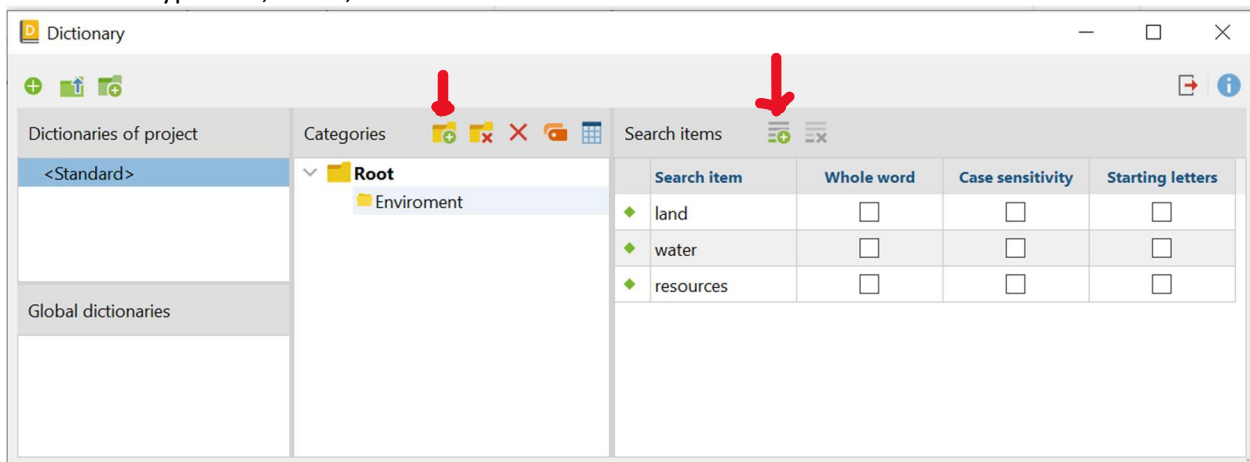
f) Dictionary – Create a Category - to lump words into one category and use the category as a search term

click New Category
type Environment
click New Search Items
type land, water, resources

g) *Category Matrix Browser* (formerly Dictionary-based Content Analysis) - requires a category to be defined in the dictionary for it to work e.g., the Environment category we created in F above.
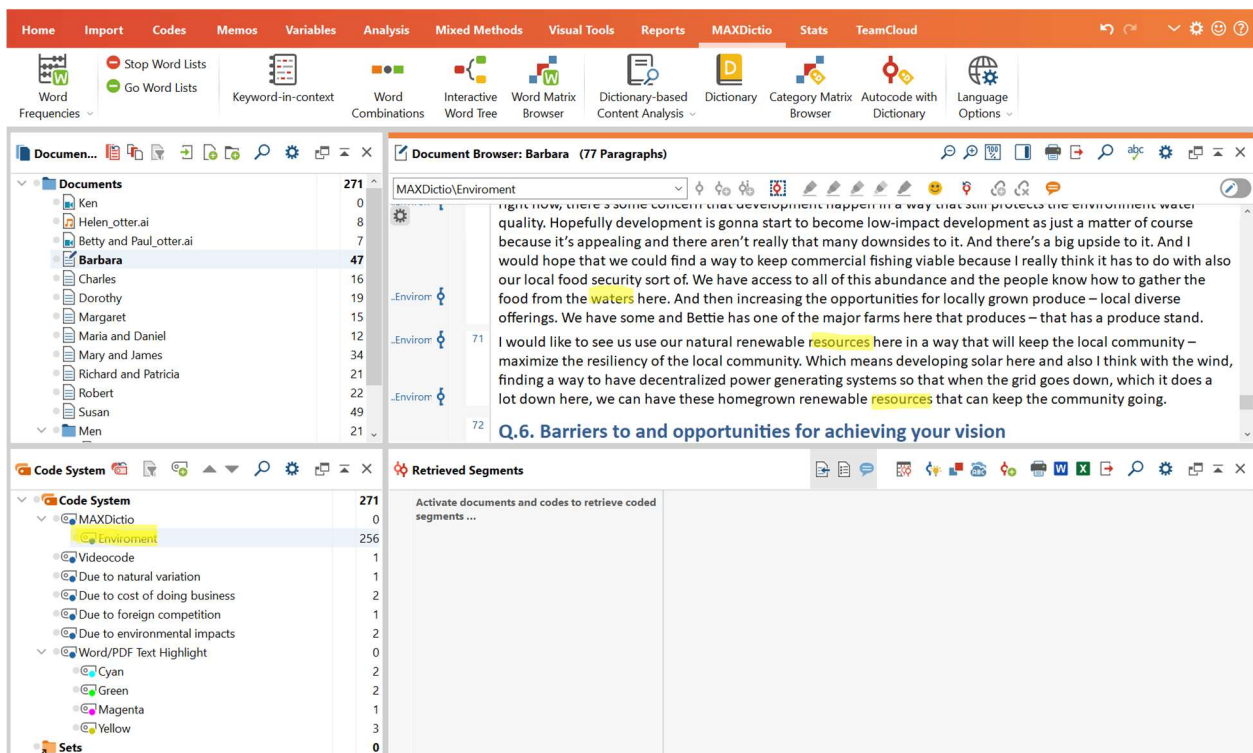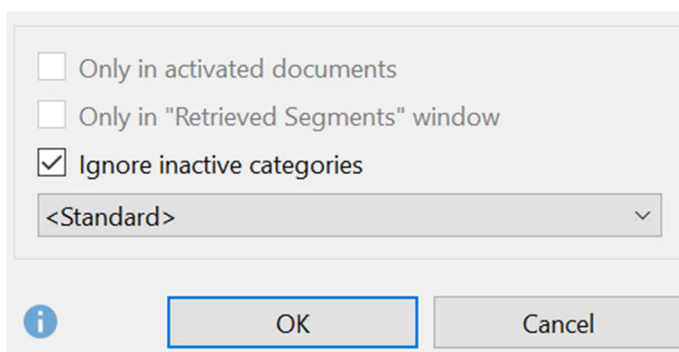
   a. Click *Category Matrix Browser*, accept default settings, and hit OK.
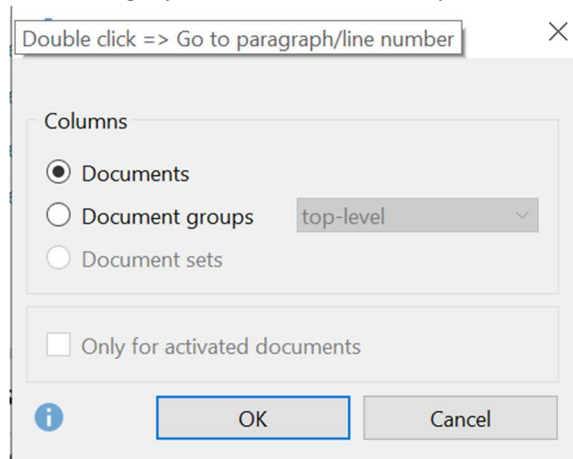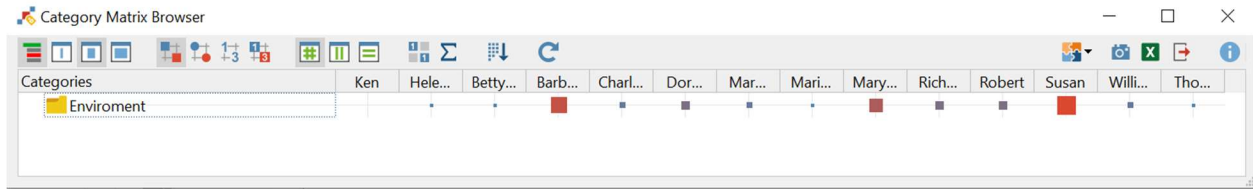
h) Autocode with Dictionary -- all text segments with words in the category will be automatically coded with the name of the category, which is Environment in F above. A MAXDictio code will be added in the code system with Environment as a subcode.

Notes:

Lemmatization is closely related to stemming. In linguistics, it is **the process of grouping together the different inflected forms of a word so they can be analyzed as a single item.** For example: walk, walked, walking.

On memos, comments, paraphrases and summaries:

[Memos & Comments - Paraphrases & Summaries: Which, When, What for - MAXQDA](#)

[Paraphrase Text Passages and Image Segments - MAXQDA - MAXQDA](#)

QTT

[The Idea behind "Questions - Themes - Theories" - MAXQDA - MAXQDA](#)

Links:

[Internal Links - MAXQDA - MAXQDA](#)

Sources: MAXQDA 2022 Manual

https://www.maxqda.com/help-mx22/welcome

Contact info for support: ccss-researchsupport@cornell.edu