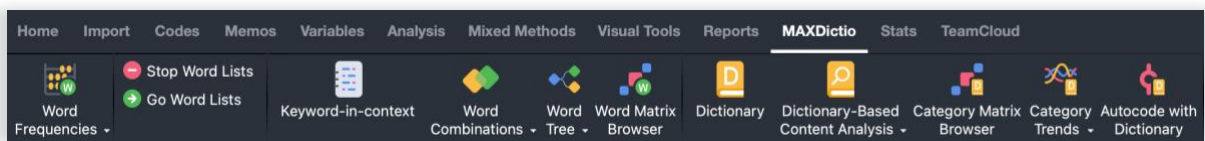


Quantitative Text Analysis (MAXDictio)

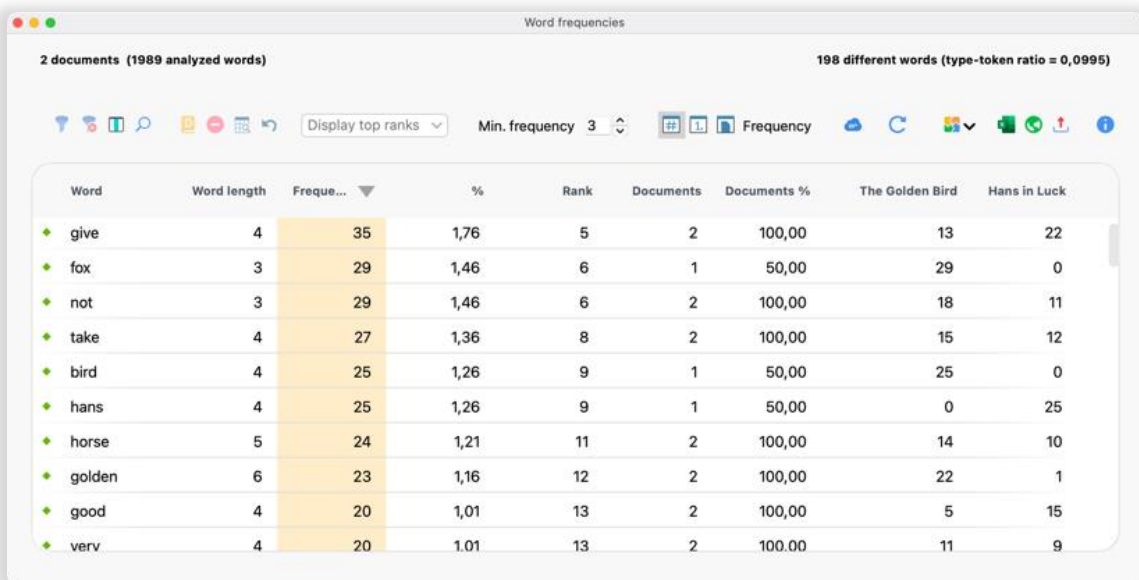
MAXDictio is a quantitative text analysis module that is part of MAXQDA Plus and MAXQDA Analytics Pro. It is not a part of MAXQDA Standard. MAXDictio offers tools for word-based analysis of text and PDF documents:

- Analysis of word frequencies and word combinations
- Analysis of Keyword-in-context (results tables and Interactive Word Tree)
- Quantitative content analysis with a dictionary



1. Exploration: Word Frequencies

Select **MAXDictio > Word Frequencies** to count and list words in all (or only in activated) text and PDF documents. Alternatively, you can restrict the search to the text currently displayed in the “Retrieved Segments” window.



The screenshot shows the "Word Frequencies" window. It displays 2 documents with 1989 analyzed words and 198 different words (type-token ratio = 0,0995). The table shows the following data:

Word	Word length	Frequ...	%	Rank	Documents	Documents %	The Golden Bird	Hans in Luck
give	4	35	1,76	5	2	100,00	13	22
fox	3	29	1,46	6	1	50,00	29	0
not	3	29	1,46	6	2	100,00	18	11
take	4	27	1,36	8	2	100,00	15	12
bird	4	25	1,26	9	1	50,00	25	0
hans	4	25	1,26	9	1	50,00	0	25
horse	5	24	1,21	11	2	100,00	14	10
golden	6	23	1,16	12	2	100,00	22	1
good	4	20	1,01	13	2	100,00	5	15
verv	4	20	1,01	13	2	100,00	11	9

The result table lists all words in the analyzed text by their absolute and relative frequencies. The "Rank" column provides information about the ranking of each word. Words with the same frequency are given the same rank.

The columns “Documents” and “Documents %” indicate the number and percentage of documents in which a word occurs.

Stop Word and Go Word Lists

Stop word lists are a place to collect uninteresting words, for example “to”, “or”, or “and”, that you wish to exclude from your analysis. You can send words to the stop list with a click on the green icon in result tables. A click on “Refresh” re-calculates the result table and will exclude those items.

You can also open **MAXDictio > Stop Word Lists** to customize, export, import and merge stop word lists. MAXQDA already contains stop word lists in a few languages that you can use as your starting point.

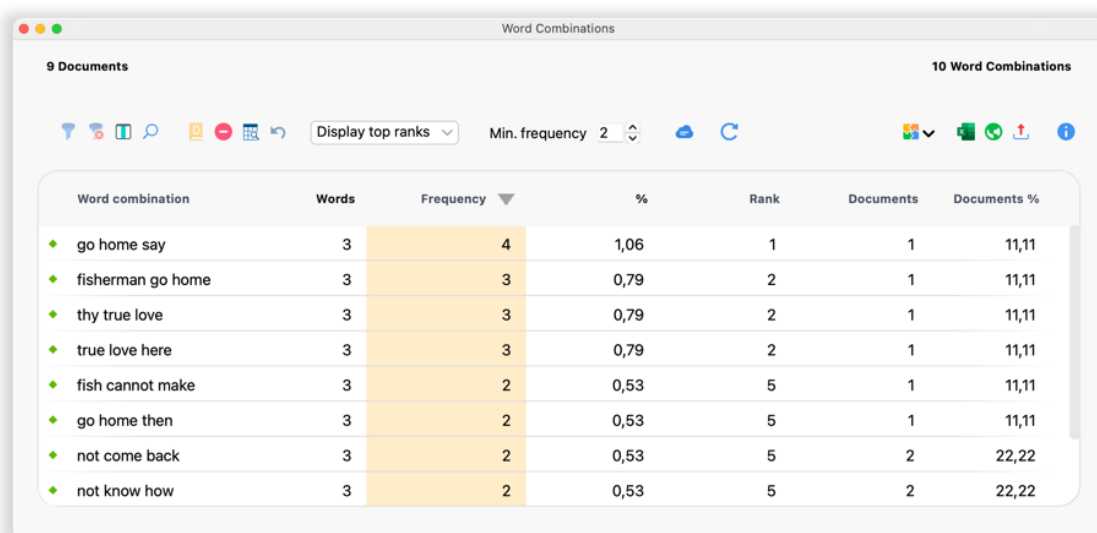
Differentiate by Document, Document Group or Document Set

Result tables can hold additional columns to display word frequencies for documents or document groups. Columns can display how often a word occur, the rank of a word in this document (group) or if the word occurs at all (1, 0).

2. Exploration: Word Combinations

Select MAXDictio > Word Combinations works similar to the Word Frequencies feature but counts and lists word combinations rather than single word occurrences.

You can search for combinations of up to 5 words. You can decide if word combinations should occur within the same sentence or if word combinations should also be counted across paraphrase and full stops.



Word combination	Words	Frequency	%	Rank	Documents	Documents %
go home say	3	4	1,06	1	1	11,11
fisherman go home	3	3	0,79	2	1	11,11
thy true love	3	3	0,79	2	1	11,11
true love here	3	3	0,79	2	1	11,11
fish cannot make	3	2	0,53	5	1	11,11
go home then	3	2	0,53	5	1	11,11
not come back	3	2	0,53	5	2	22,22
not know how	3	2	0,53	5	2	22,22

Tip: If you hover with a mouse over a row in the results table, all the lemmatized words or word combinations in this row will be displayed.

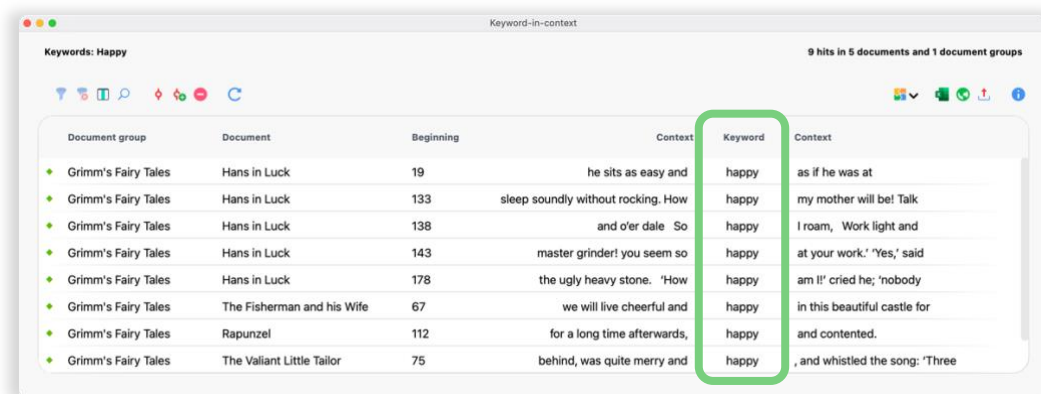
Lemmatization

Activate the lemmatization option to count words from the same stem together. For example, the frequency for “give” will include occurrences of give, gave, or given. Lemmatization is currently available for 14 languages (Bulgarian, Catalan, Czech, German, English, Spanish, Estonian, French, Hungarian, Italian, Polish, Portuguese, Swedish, Ukrainian).

3. Exploration: Keyword-in-context

Select **MAXDictio > Keyword-in-context** to search a word (the "keyword") and view the search term in a tabular overview in the context of its surrounding words. The table also displays document information (name, paragraph).

Tip: This table is interactively linked to the original source data. Click into a table row to highlight the search item in the original text in the Document Browser.



Keywords: Happy 9 hits in 5 documents and 1 document groups

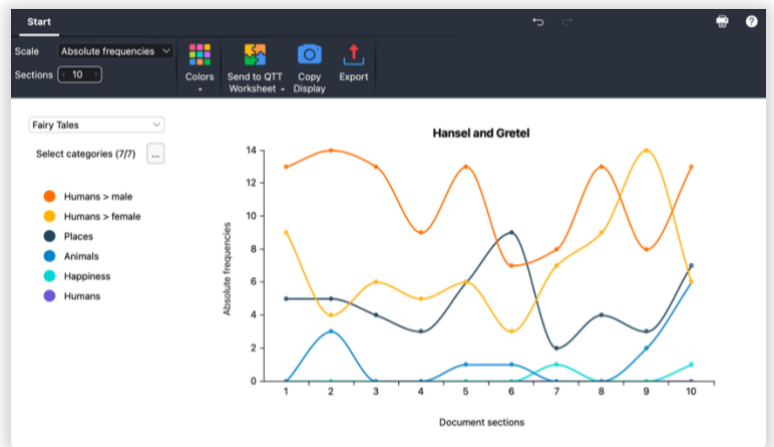
Document group	Document	Beginning	Context	Keyword	Context
Grimm's Fairy Tales	Hans in Luck	19	he sits as easy and	happy	as if he was at
Grimm's Fairy Tales	Hans in Luck	133	sleep soundly without rocking. How	happy	my mother will be! Talk
Grimm's Fairy Tales	Hans in Luck	138	and o'er dale So	happy	I roam, Work light and
Grimm's Fairy Tales	Hans in Luck	143	master grinder! you seem so	happy	at your work.' 'Yes,' said
Grimm's Fairy Tales	Hans in Luck	178	the ugly heavy stone. 'How	happy	am I!' cried he; 'nobody
Grimm's Fairy Tales	The Fisherman and his Wife	67	we will live cheerful and	happy	in this beautiful castle for
Grimm's Fairy Tales	Rapunzel	112	for a long time afterwards,	happy	and contented.
Grimm's Fairy Tales	The Valiant Little Tailor	75	behind, was quite merry and	happy	, and whistled the song: 'Three

Tip: Each column of a result table can be alphabetically sorted with a click on the column header. You can rearrange columns via drag & drop, and right click on a column header to filter for characters.

4. Exploration: Word Trends / Category Trends

Trends visualizations offer visual insights into the occurrence of words or dictionary categories.

Use the **Word Trends** to view word frequencies across one or across multiple documents. The **Category Trends** on the other hand visualizes the occurrence of word from a dictionary category

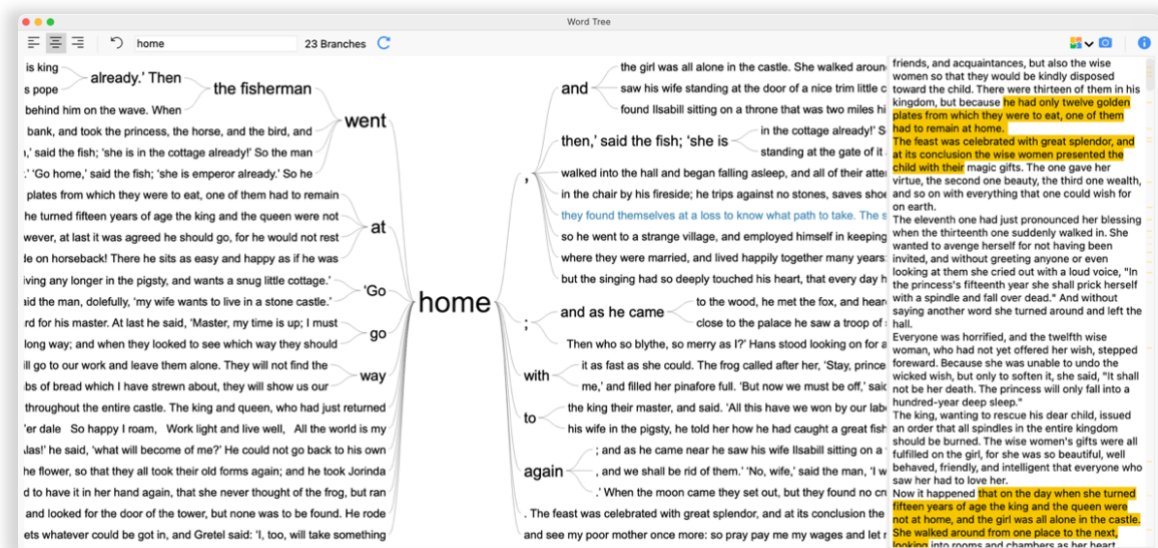


The trend visualization are interactive.

You can click on any element in the legend to temporarily hide it from the graphs, modify the graph through various filters, or click on a node to call up the search results and look deeper into your data.

5. Exploration: Interactive Word Tree

Select **MAXDictio > Interactive Word Tree** to visually explore word and word combinations in your data). Drag all the documents, document groups or sets into the dialog window that you want to use to create a Word Tree.

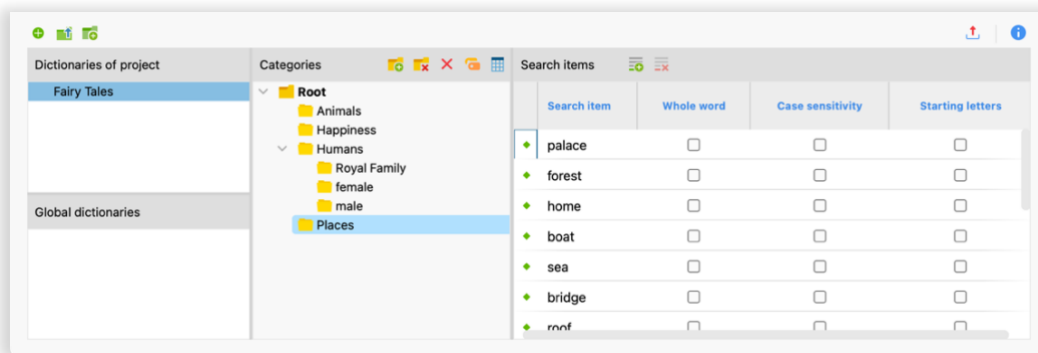


The word “home” is the root of the tree with branches to the left and right showing the words before and after that word. The root can be placed in the middle (as shown above) or as the starting or ending point. The window to the right contains the complete analyzed text. Yellow highlighted passages are currently displayed in the tree view.

Tip: Click on another word to use it as the new root or search for word (combinations) in the search field.

6. Dictionary Based Context Analysis

To conduct a dictionary based quantitative context analysis, your first step is to create a dictionary via **MAXDictio > Dictionary**. A dictionary may contain any number of categories with an unlimited number of search items. A simple dictionary may look like this:



This dictionary contains categories, like “Places” or “Humans”, each of which holds several search items. A search item can also consist of multiple word.

Like stop-lists, dictionaries can be imported, exported, and merged. By default, dictionaries and stop lists are saved within a MAXQDA project, to ensure that if you share your project data with your team, everyone can use them.

7. Frequencies of Dictionary Categories

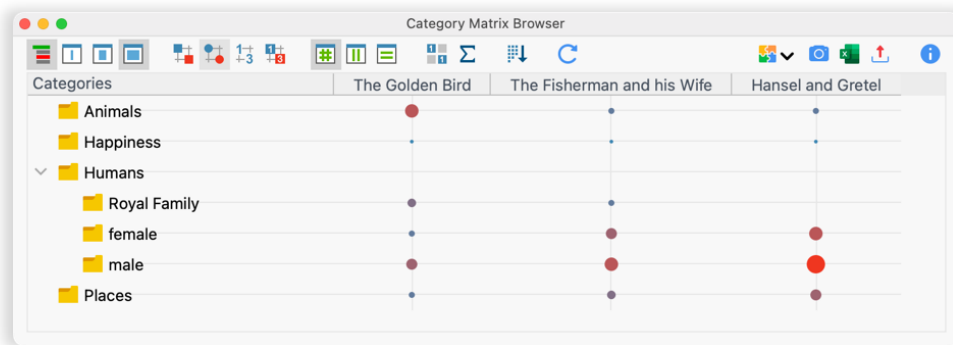
Select **MAXDictio > Quantitative Content Analysis** to create a frequency table similar to the ones we discussed earlier. This time MAXQDA only searches for search items in active dictionaries.

Document group	Document	Words	Animals	Happiness	Humans	Royal Family	female	male	Places
◆ Grimm's Fairy Tales	The Golden Bird	2542	69	2	0	32	18	52	14
◆ Grimm's Fairy Tales	The Frog-Prince	1197	19	2	0	27	21	10	6
◆ Grimm's Fairy Tales	The Fisherman and his Wife	2124	28	2	0	26	52	81	36
◆ Grimm's Fairy Tales	Little Brier-Rose	1280	5	1	0	25	14	15	16
◆ Grimm's Fairy Tales	The Valiant Little Tailor	3354	17	5	0	15	12	93	14
◆ Grimm's Fairy Tales	Rapunzel	1412	3	3	0	8	40	22	7
◆ Grimm's Fairy Tales	Hans in Luck	2371	56	11	0	0	4	50	8
◆ Grimm's Fairy Tales	Jorinda and Jorindel	1140	14	0	0	0	22	13	14

Tip: You can also right click on a document or document group to start the quantitative content analysis for the selected document(s).

8. Visualize Frequencies of Dictionary Categories

Select **MAXDictio > Category Matrix Browser** to visualize the same type of frequencies in a visual matrix. The image below visualizes how often search items from different categories occur in different fairy tales. You can also start this feature by clicking the matrix browser icon in the result table of a quantitative content analysis.



9. Autocode Documents with Dictionary Categories

Select **MAXDictio > Autocode with Dictionary** to automatically search for occurrences of category search items. Each search result can be coded with the name of the category, that holds this search item. All the usual autocode options of MAXQDA are available, e.g. to code just the search item, or the (adjoining) sentence(s) or paragraph(s) it occurs in.

