

Spotlight Session: Comparing and Contrasting the Smart Coding and Creative Coding Tools in MAXQDA

When to use Smart Coding:



- During the main coding work phase.
- Use this to refine your detailed codings, or
- Confirm consistency of meaning within key codes, or
- Split one code into several more detailed codes, or
- Reassign the contents of a code you no longer want into several alternative codes.
- This tool works at the level of individual coded segments.
- Start Smart Coding with a button in the Retrieved Segments window (see above) and then it works with the data segments which are in that window at that time, or from the Codes Menu (see below).



When to use Creative Coding:



- After initial inductive coding work has been done
- When you are ready to re-organise or re-structure your coding scheme, to create new groupings of existing codes, including higher-level concepts.
- This tool is more visual and intuitive than simply dragging codes around in the Code System window.
- This tool works with whole codes, together with all of their data segments.
- Start Creative Coding from the Codes Menu (see above).

Smart Coding:

This tool has been designed to help you to adjust and refine detailed coding work at the level of individual coded segments. It can be useful when you want to split a code into a number of subcodes, or when you need to reassign all the segments of a code that is no longer useful into several alternative codes. It greatly assists when you want to examine one code in detail and improve the closeness of fit with all of its segments. It is not used for restructuring your coding scheme, so it is quite different from the other item in this session.

Starting to use Smart Coding:

Before exploring this set of tools in a live project please make sure that you have made a backup copy and used the option to open the backup and work in that, so that your master project is safe from unintended changes.

If you start this function from the menu Codes > Smart Coding you will begin with all the coded segments in your current project, which is probably too much material for learning about it. Another way is to activate the main documents and a single code and start the function from its icon on the Retrieved Segments window toolbar (see the illustration on page 1 above).



Here, I will use the English Work Life Balance example project and the existing code for "Typical workday". The illustration below shows this immediately after starting the function. Note that the first icon on the Smart Coding toolbar toggles the filter for activated codes on and off.

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			Riley, Pos. 3	at a fixed time, becc it's always a bit diff Of course. Then I re answer them, that is team. What else ha What's up today? E are at. But mainly si there are meetings, company where you group of three or fe	cause I have the possibili ferent. First of all, and me ead through the e-mails is probably like everywh appened yesterday? Or is Exactly. Apart from that, itting at the computer, r, but rather in small grou	tings, but rather that in a ou want to do a project				27	
			Riley, Pos. 5	finished reading a f return trip in the tra	After eight hours. But of course, it often happens that you haven't finished reading a few things or something, which has to be done on the return trip in the train or when there is an important deadline than I usually have some work left to finish it at home.					27	
			Riley, Pos. 7	First cook somethin I try to go to sports		also meet a lot of friends and				27	

In the main panel, you can see all of the segments that are currently assigned to the code that is highlighted in blue on the left (in this case "Typical workday"), and the number of these segments is shown both on the highlighted line and in the bar above the texts (16). The "Codes" column displays any *other codes from within the list of codes as displayed on the left* that are also assigned to each segment, and the "Comment" column shows any comments for the currently selected code beside the segment to which they are attached.

Within this window, you can assign whole or part segments to other existing or new codes, in addition to or instead of the current assignment. And you can switch between the themes that you are working with simply by selecting another code row in the left-hand panel. You can add or edit comments on the right, and you can edit the code memos on the left.

By un-highlighting the 1st icon ("Only activated codes") you can switch to displaying the entire Code System, with the result that you also see more codes listed to the right of the segments – this is probably not helpful most of the time but could be useful if you want a quick check that a segment has been coded somewhere else in particular.



A little practice with this tool on unimportant data, such as this example project, will enable you to use it intuitively with your live data. Try to obtain the following effects:

- Select a whole data segment by clicking on its document name cell.
- Check the context menu options for that segment with a right-click (Windows).
- Create new subcodes in the list in the left-hand panel with the plus sign in a green disc when you hover over a code name in that list.
- Assign a whole data segment to an additional code by selecting it and then dragging it onto the code name in the left-hand panel. See that new code name appear in the field to the right of the data segment. (Note that you cannot add codes by dragging from the code system onto the data segment because the whole display changes as soon as you click on a code).
- Select a part of a data segment for re-coding by double-clicking in the text cell and then highlighting the required portion before dragging that onto the additional code.
- Assign a segment to a different code and also remove it from the current code by pressing the Shift key (Windows) or Command key (Mac) as you drag onto the replacement code.
- Select different codes in the Code System panel to see all of their segments displayed in the main panel.
- Explore the delete functions (red crosses) with care. In the Code System panel you can delete a whole code with all of its allocated segments. In the Codes Column to the right you can remove a single additional code allocation. In the context menu for a highlighted segment you can remove the allocation of the code currently displaying in the central panel.
- While displaying one code in the central panel you can view all of the overlapping segments for another code by clicking on one of its labels in the Codes Column to the right. (You may need to switch to a different code and back again to remove these highlights afterwards).
- In this Spotlight Session I will demonstrate most of these techniques after adding new subcodes for working hours, food & drink, children and travel & commuting.

Creative Coding:

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• Carcise		5	
• Food & drink		18	
• Free time		9	
• Friends		5	
Housework		2	
Meditation		1	
Meetings		4	
		4	
Shopping		3	
Showering		2	
• Studying		3	
• Travel & commuting		5	
• Work at home		4	
• Work described		1	
• Work times		18	
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Here is an example based on the English language "Work Life Balance" example project available in MAXQDA 2022.

Following on from the Smart Coding example above, sub-codes have been applied to the interview documents and the "Typical workday" code identifying segments that mention a variety of activities.

Some commonalities are apparent, and we will create new code groups around these.



Starting to use Creative Coding:

Before exploring this set of tools in a live project please make sure that you have made a backup copy and used the option to open the backup and work in that, so that your master project is safe from unintended changes.

There is only one way to start this function, the menu option Codes > Creative Coding. This opens a new window on top of your program and freezes all other functions while it is in use.



- You can drag in codes in a variety of ways:
- Drag in separate codes, one at a time, or
- Drag in a group header code to also bring over all of its subcodes.
- Use the "Remove from Map" function in the context menu to discard unwanted items (right-click on the item in the map).
- In this example, I have dragged in the whole "Typical workday" group of codes.
- When you are satisfied that you have all of the codes that you want to work with in this particular session, click the function Start Organising Codes.
- The panel with the code system disappears and is replaced by a panel showing all of the code colours currently used in the project.



• When you click on any object in the map, a second option "Format" appears in the orange menu bar.

The "Creative" stage:

You are now ready to restructure this particular bundle of codes in any way that you like. The only limit is your own imagination. You can create new codes to act as headers/holders for sub-groups of codes and these may well come to be your higher-level concepts. Here we will explore the mechanics of the tool.

Example:

- Using the "New Code" function in the Standard menu, I have created 3 new codes, called "Work", "Personal" and "Domestic", and placed them in a line between the header code "Typical workday" and its subcodes.
- Then, I moved the lower level codes around so that the 6 work ones were roughly below the new "Work" code, the 8 personal ones were below the "Personal" code and the other 3 were below the "Domestic" code, as illustrated here. We may not agree on the placing of "Friends" below.



 Next, I clicked on the tool "Link (Define as Subcode)" so that it became shaded (as an indication that I was then in "Linking" mode), and drew lines from "Work" to "Work times", "Meetings" etc. This defines a new code/subcode relationship with each line.



• Note that, because a code can only be a subcode of just one other code, "Meetings" is no longer a subcode of "Typical workday".



- I created links to define the remaining 6 work codes as subcodes of Work, to make the middle group of codes subcodes of Personal, and the other 3 codes subcodes of Domestic.
- I then drew linking arrows from Typical workday to the 3 new intermediate level codes to create the new structure as illustrated below:



- Finally, I clicked again on the "Link" button to unshade it and leave "Linking" mode so that I could tidy-up the map by moving the codes around.
- I changed the colour of the "Work" code by first selecting its symbol on the map, then selecting the "Code Color" function in the menu bar above.
- Note that you are also offered the chance to make all the subcodes of Work change to its new colour as part of this operation.
- You can explore other formatting options when you select an object in the map and going to the Format menu.
- Colour is the only format change that will be transferred into the main code system when you quit this session. All of the other formatting options only affect the map display. You might use these to create a more effective summary of the process for inclusion in a report or thesis as an image (by using the 3 functions at the right-hand end of the Start ribbon).
- Note that the map you have created will be stored in your project as a MAXMap, so you will be able to view it again afterwards, and even send a



copy to the QTT section where you can add notes/insights to explain your thinking further.

The "Impact" stage:

So far, all of the adjustments you have drawn on the map surface are temporary "proposals". It is only when you select the function "Quit Creative Coding" in the top-left corner that you have the chance to put them into effect in your project. Below is an illustration of the dialog you will see when you quit:

?
Apply code structure to your code system? This process is nonreversible. The Creative Coding map will be saved as a regular MAXMap.
Yes No Cancel

- The "Cancel" option is there to get out of the quitting process and return to the creative coding map with the possibility of making further changes.
- The other 2 options give you the choice between applying the changes or not.
- Note that this is possibly the only situation in which a MAXMap actually alters a project, so this is a serious choice.
- If you choose "No" then the window will close and no changes will be made in the Code System. However, a copy of the map will be saved in MAXMaps, so at a later time you could see what you were thinking about even though you didn't go through with it.
- When you have reassured yourself that you are only working in a temporary backup version of your project, please select "Yes" so that you can see how this creative coding session impacts on this project.
- You should see the new code groups and colours in the Code System window. The codes you have been working on will have been moved to the top of the Code System, so you may want to drag the whole group to a different place.
- If you open MAXMaps (in Visual Tools) you will find the copy of the Creative Coding map that has been added there.



Other points of interest:

- You can merge two or more codes into one inside a Creative Coding map, simply by dragging the code/s you no longer want (the "origin" code/s) directly onto the code you want to keep (the "target" code).
- You can display all of the data segments linked to a code by using the context menu for that symbol in the Creative Coding map. This may be very helpful as you consider your reorganizations in detail.
- You can create or edit the code memo associated with any code in the map and these changes will be made in the Code System when you quit with option "Yes".
- You can temporarily 'group' several objects in a map by drawing a box around them, say to change their colour in one step, or to move them as a block.
- You can save multiple versions of your Creative Coding maps in order to document various stages of the reorganization; click on "Save as Map in MAXMaps" to do this.

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