How To Create a Filter for Variables in a Grid Question

Problem

A **Pick Any – Grid** question shows the brand attributes associated with different companies. There is a desire to "filter" the resulting table so that for each brand, data is only shown from respondents that spontaneously mentioned that brand (recorded as a separate **Pick Any** question). This example, from `phone1.Q`, shows how to create a **Pick Any** question filtered by spontaneous brand awareness.

Steps to solve

1. In the **Variables and Questions** tab:
   a. Select the first variable in the unaided awareness question, (`Q5_1` in this example).
   b. Right click and select **Set Question...**
   c. Name the question `Unaided awareness - Brand Name` (e.g., `Unaided awareness - AAPT/Cellular One`)
   d. Click **OK.**
2. Click on the **Values...** button. Note the value of `Yes` (`1` in this example).
3. Right-click on a row and select **Insert Variable(s) | JavaScript Formula | Numeric....**
4. Fill in the fields in the box as follows:
   a. **Name**: Any (e.g., `AwareAssoc`)
   b. **Label**: `Aware + "First Brand Image Attribute from the Pick Any - Grid" + "- Brand Name"` (e.g., `Aware Bureaucratic - AAPT/Cellular One`)

      It is essential that this is typed in without any error, as Q will be examining this label to identify a pattern, and if you do not type it correctly, there will be no pattern to find.
   c. **Expression:** `if(variable_created_in_Step1 == Value_Code_for_Yes) First_variable_in_grid_question; else NaN;` (in this example, `if(Q5_1==1)q20a1; else NaN;`).
   d. This *JavaScript* code is interpreted as follows: if the respondent has a value of 1 for `Q5_1`, a newly created variable will contain the respondent's value from `q20a1`; otherwise, it will contain a missing value (i.e., `NaN`), and thus automatically be filtered from any analyses. Observe that values of the variables referred to in the code, and the resulting variable, are previewed at the bottom of the dialog box.
5. Press **OK**.
6. Right-click on the newly created variable, and select **Insert Ready-Made Formula(s) | Use as Template for Replication...**. This will cause a large number of new variables to automatically be

created, where the selected variable is used as a template. The **Template Replication** dialog box shows how Q has assessed which aspects of the code are to be changed. It shows that the unaided awareness variable `Q5_1` is to be used in all of the variables, but the brand association variables are to be looped through when creating all of the variables. Q has worked this out by examining the questions that the variables belong to (i.e., `Q5_1` is in a variable on its own, so must always be used, whereas `q20a1` is the first of many variables in the question `Q20. Image`, so Q loops through all of these.

7. Press **OK**. Q has now automatically created a new question, based on the brand image attribute **Pick Any - Grid** question, using only data for respondents who are aware of the brand selected in Step 1. The resulting table is identical to that obtained by applying a standard filter to the table for the **Pick Any - Grid** question. The next step is to modify the variables in the newly created question to reflect awareness of the different companies.
8. Right-click on the original template variable and selected **Delete Copied or Constructed Variable(s)**. This variable is no longer needed.
9. Select all the labels from the newly created question by clicking on the first one, holding down **Shift** and clicking on the last one.
10. Press **Ctrl** and **c** on your keyboard to copy, open a new Excel workbook, and paste it into cell A1, with all of these cells selected. If it has appeared in multiple columns it is because you are not using the default Excel settings in **Text to Columns** (this may occur if you have previously used **Text to Columns**).
11. In Excel, select **Data | Text to Columns** (in different versions of Excel, these may have slightly different names), and
    a. Select **Delimited**
    b. Press **Next**
    c. Check **Other** and type a dash (-) into the box.
    d. Select **Finish**.
12. If there is a space before the brand names in column C, you can remove them by using **Text to Columns** again,
    a. Select **Fixed width**
    b. Press **Next**
    c. Move the arrow to between the first space and the first letter. If there is no arrow in the panel, click on where you wish the arrow to be.
    d. Select **Finish**.
13. If a brand contains a dash (-) in its name and **Text to Columns** has caused the name to be broken into multiple columns, change them back to the correct names (e.g., One-tel)

14. In cell D1 type =B1 & " - " & A1 and press **Enter**.
15. Copy the formula in cell D1 to the bottom of your list.
16. Copy the contents in column D, return to Q. Right-click on the selected labels in Q and select **Paste Labels**. The labels now begin with the brand name, followed by the attribute.
17. Right-click and select **Sort by** | **Label**. The variables are now sorted by brand.
18. Select the rows containing the second brand (New Tel in this example), right click and select **Search/Replace** | **Formulas…** and press **No**.
19. In the **Find what** box, enter the variable name created in Step 1 and in **Replace with** box, enter the name of the brand awareness variable matching the brand in the label. Press **OK.** (e.g., New Tel is the second brand in the list, we enter `Q5_1` in the **Find what** box and `Q5_2` in the **Replace with** box)
20. Repeat the search and replace process for the remaining brands. (Note in the **Search/Replace Formulas** dialog box you can retrieve previous search terms by clicking on the black triangle to the right of the **Find what** and **Replace with** fields).
21. Rename the question as `Brand Associations (Base: Spontaneously Aware)` and change its **Question Type** to **Pick Any**.
22. You can check if you have created the new question correctly by comparing the counts of the brand awareness question (remember to put the first brand back into the question) and the sample sizes for the new question. If they do, you have created the new **Pick Any** question correctly. The steps are below:
    a. Double-click on the row numbers to see the resulting table.
    b. Right-click on the table and select **Cells – Below** and **Base n**.
    c. Save the table by pressing  .
    d. In the **Variables and Questions** tab , select all the unaided awareness variables. Right click and select **Set Question...** and **OK.** This will return the variables into a single question.
    e. Double-click on the question and select **Statistics – Cells** and **n**. Check that the counts for this table match the sample size bases shown at the bottom of the recently created table.

Additional reading

Online training: Manipulating data: Questions: Grids. Terms shown in italics and bold can be found in the index of the *Q Reference Manual,* the *Q Quick Start Manual* and via the **Help** menu within Q.

What to do if the problem is not solved

If these instructions are insufficient, please email us (**Help | Email Support...**) with a detailed description of what in the instructions is not working for you and we will either provide you with more comprehensive instructions, or, upon your request, we can do the analysis for you in your file (fees apply) .