

TUTORIAL : SPIRAL, statistics and custom statistics

Some information about the statistics that are built in our website, and how to create your own using a dedicated wiki plugin



Let's plug it in and start ;)

Introduction

Statistics engine

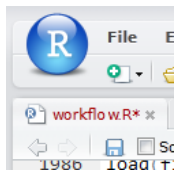
First, the statistics do use a professional and broadly used statistics engine, [R](#), that is open source and used by researchers and statisticians all over the world. This software runs on our dedicated server in conjunction with [tikiwiki](#), the CMS engine of our website. Basically, whenever you edit a webpage, you can include a plugin called {RR} with instructions that the website will send to R, and get back the answer : a graph formatted in png.

Wikispiral basic statistics :

- There are basic statistics for the whole database : <https://wikispiral.org/tiki-index.php?page=Statistics>.
- Each Plat-form has as well a basic statistical page : <https://wikispiral.org/tiki-index.php?page=Stats&CGname=Mulhouse>. It is a common "unified" page and in bold you can the **&CGname=Mulhouse** parameter, which loads Mulhouse data.
- There is the possibility to create custom statistics, in wikipages, articles, blog posts... See further: *explaining this is the purpose of this mail*.

When you don't find some stats in those elements suitable to your needs, then you need to build yourself (or to ask myself or other R knowledgeable person to do for you) a custom statistical tool.

There are three custom statistical tools we can provide :



For researchers and trusted people there is an access to a statistic IDE (development environment), [Rstudio](#), which enables to work on the database directly and which runs in a web browser.



- A wiki plugin called [RR](#) exists, that permits to embed R code in any wiki page that sends instructions to R in order to process the calculations and to send back an image with the resulting chart.

Another wiki plugin called **spiralstatsfilter**, has been created specially for SPIRAL in order to help those who don't master R language, and which enables you to select the data, the filters (for statistical subsetting), and graphical output options - *This is the tool that will be discussed in this mail*.

Basic info:

How do the SPIRAL statistics tools work ?

1 - You have several online databases who register data for every element (plat-form, Homogenous group, criteria, ...)

2 - There is a server-based script which runs each ten minutes to update a file who combines a selection of information from several databases, and provides a csv file that contains all of the data concerning the criteria (a line = a criteria).

```
SCRIPT_RDA="create_Rda.R" # this script exports data from the database and produces STA
TS_FILE
RDA_FILE_RAW="stats_4_R_raw.Rda" # This will be created in STATS_FOLDER
RDA_FILE_RAW_TMP="stats_4_R_raw_tmp.Rda" # this is a temporary file to ensure RDA_FILE
```

3 - Then this file is used by our plugins that are included in the wiki pages, and in this case spiralstatsfilter.

4 - Once the stats have been calculated the resultant image is cached and you need to refresh all caches if you want it to be updated with your latest modifications. This will change as we will support the developpement for a per-page refresh tool. There's a little trick : when you do a little change in the plugin it refreshes, so you can us this and make minor changes in order to have a refresh.

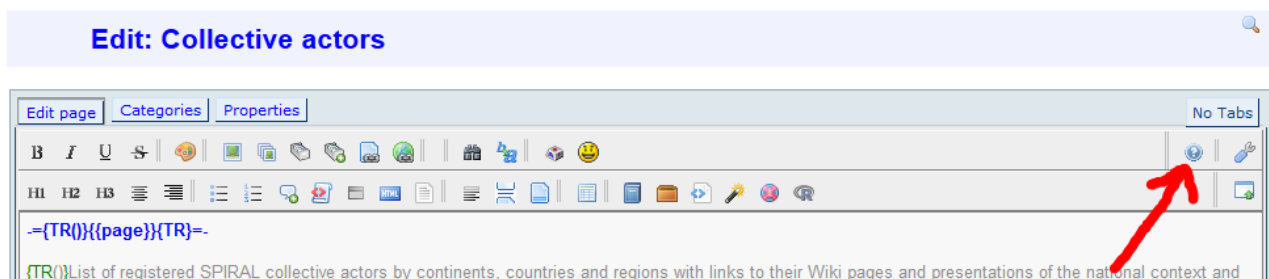
Steps to use spiralstatsfilter:

1 - How to include a plugin ?

Tikiwiki uses, like all wikis, wikicode. Wikicode is special characters combination that is interpreted as formatting, like `__text__` = puts "**text**" in bold. But more easily you can select a text and click on the corresponding icon, that will apply the proper wikicode for you.

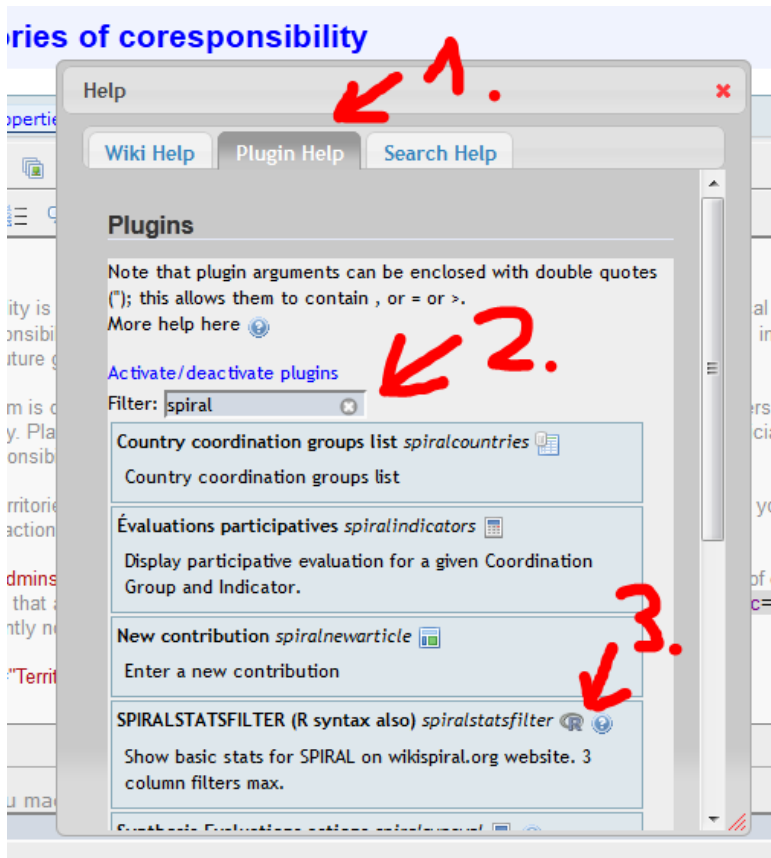
Moreover, Tikiwiki fantastically expands its functions by plugins. A plugin is a special set of instructions, included into curly braces, that are interpreted by tikiwiki and provide differents functions, like : `{img src="img/icons/add.png"}` = show the image from the given link. All plugins are listed in the wiki help, and with it you have a very easy way of including a plugin in your page (easy = **without writing any code**).

When you edit a page, you have a help option at the right of the toolbar :



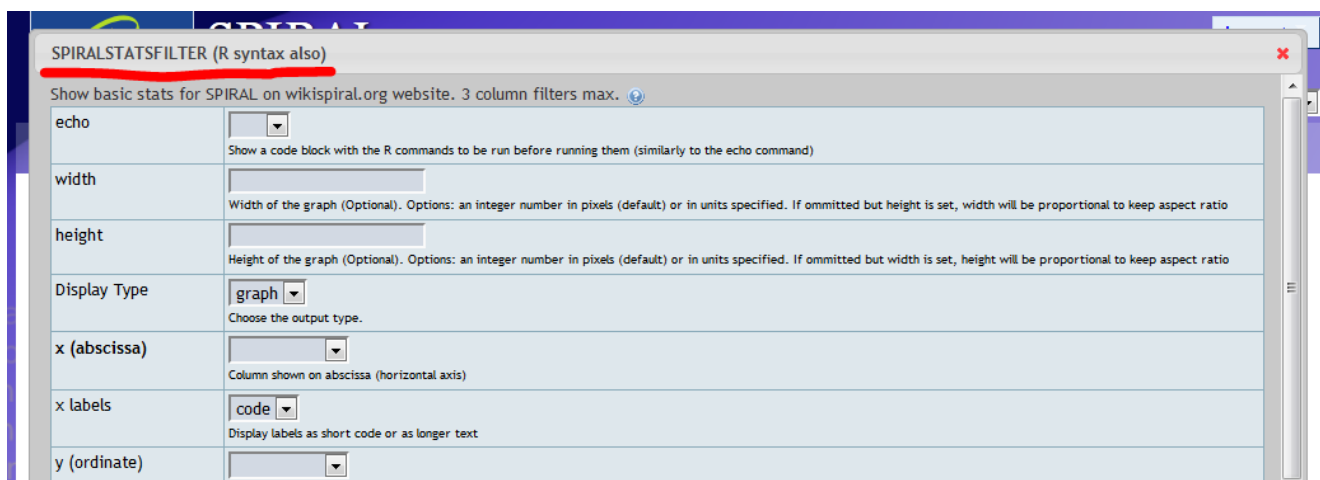
This opens a special menu where you can either have some explanation about the wiki code

or have a searchable list of plugins :



1. Click on the tab of the plugin list
2. Filter it out by a cunning search query
3. Click on the little icon to insert this plugin in your page

Then you will have access to the special menu of the plugin, looking like this :



Basically, you can now tweak some options and save the page, and see what the results are ! There's no harm at all in trying !

2 - What is spiralstatsfilter ?

Spiralstatsfilter is a special tool created by Jean-Marc Libs, Joël Obrecht, and with the help of

Xavier de Pedro, author of R wiki plugins. The purpose of this plugin is very simple : to provide a simple menu interface in order to create statistics by choosing options.

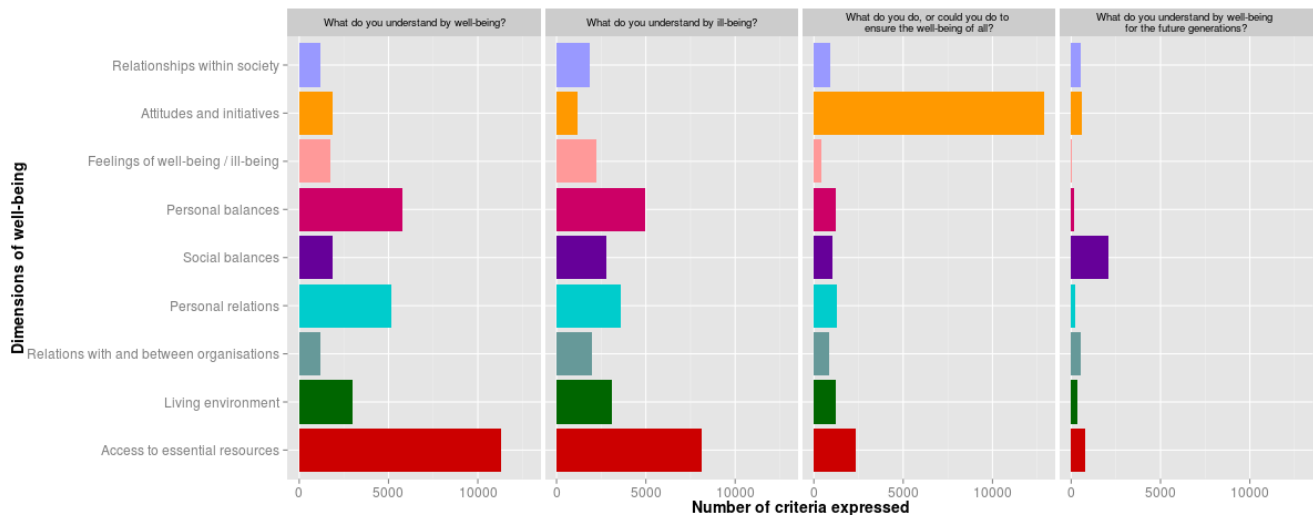
More technically, spiralstatsfilter is a code generator : you choose options, and spiralstatsfilter writes the code for you and executes it. It relies heavily on the grammar of graphics ggplot2 engine in R (Hadley Wickam).

The bases of this plugin are simple : It automatically loads the whole spiral stats file and lets you choose options and subsetting (= filtering on european, local, national, group levels) for results. If you want to make some comparisons between your results and another city or the national results, you need to use two custom stats plugins one filtered for a local group, the other for a country.

It can produce either a table (for further processing in other software) or a graph (= the plot). Currently there is only a form of graphics implemented : bar chart. You can have a simple bar chart with one variable, a bar chart with coloring (stacked fill) for two variables, and you can split your graph in multiple images (to add a third variable for instance).

For examples of use please see : <https://wikispiral.org/tiki-index.php?page=Statistics>

The following picture shows a graph with two variables : dimensions and question, where the splitting is done by question. Let's use the proper name for "splitting" : **faceting**. The fill value follows the Dimension variable. You have a facet per question. Colours have the dimension variable.



Let's try, for testing purpose, that we want a graph with this example but only for the answer of young people in Mulhouse city.

Let's also have a testing page that we all can edit together to play with this plugin :

<https://wikispiral.org/tiki-index.php?page=R+tests>

Base Options :

x (abscissa): the primary element you want to use for comparisons : Countries, Territories, Indicator level, etc : almost any element can be chosen !

y (ordinate): What you sum up or count. Use nbexpress (the number of expressions of a criteria), or leave empty in order to count elements present in x.

For instance you want to count the number of homogenous groups : choose x = HG ; y= empty.

Another example : to measure how many answers we have per question, use x = question; y = nbexpress

fill: the colouring. If it is the same element than x, it just adds some colour and a fill legend. If it is a different variable, it gets you a stacked bar chart.

labels: Can be code = WB, IB, ... or text = What do you understand by well-being, ... Use code when you want to keep the graph small.

width: the width of the resulting picture ; *height*: the height of the resulting picture : adjust in order to have a viewable graph. Default is 600px width with auto height.

Plugin editing:

A little trick : once you saved your plugin, in appears in the edited page as code :

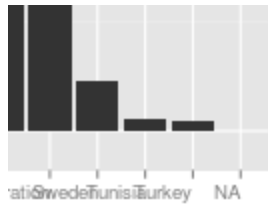
```
{spiralstatsfilter displaytype="graph" variablex="country" labelsvariablex="text"
variabley="nbexpress" variablefill="question" labelsvariablefill="text"
labelsfacetingparam1="code" labelsfacetingparam2="code" autoheightfaceting="0" showguides="n"
nondim="y" themetitleface="plain"}
```

This looks complicated but actually is very useful: you can very easily copy this code and paste it several times just changing one value, like the name of the homogenous group. To edit again any plugin, either you select it and go trough the help menu again, or you just save the page and activate **direct editing of plugin option**.

What's this ? It's an option to give you the capacity to edit page sectors or plugins without editing all the page and scrolling trough the code to find the good element. You can find it next to the edit icon top left of the page :



Click on the little green puzzle :) and it shows editing icons after all your plugins :



Click on it, and you have you plugin menu again !

Ok, now that you have the basics, let's go on !

Use case tutorials

1 - First example, a basic use of spiralstatsfilter:

Mulhouse criteria addressing well-being and ill-being questions for the Teenager group.

Let's try to follow an example, step by step, where we want an easy to do graphic but which isn't made by default in the stats page : A graph of the dimensions for a given homogenous group.

First, let's edit a page, like <https://wikispiral.org/tiki-editpage.php?page=R%20tests>. Let's go to the help menu, search for spiralstatsfilter, click the little "R" icon, and stare at the 3 page-length menu. U think at this stage you'd ask : what on earth to do with this ???

Let's be progressive.

First graph

First, let's keep echo, width, height options for later.

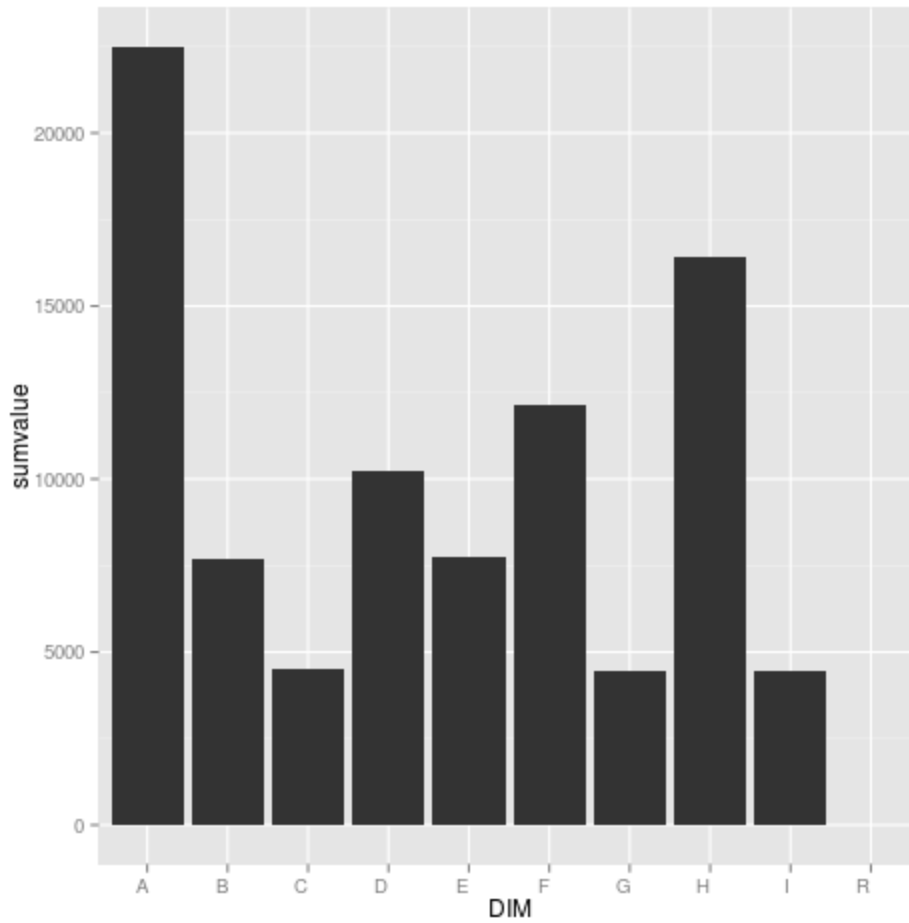
You want to have statistics about the main nine dimensions. So let's use the dropdown to choose for x : DIM

x (abscissa)	DIM
--------------	-----

and the criteria count as y :

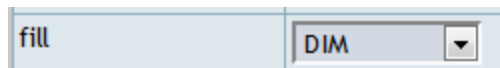
y (ordinate)	nbexpress
--------------	-----------

Let's save and see what it looks like !



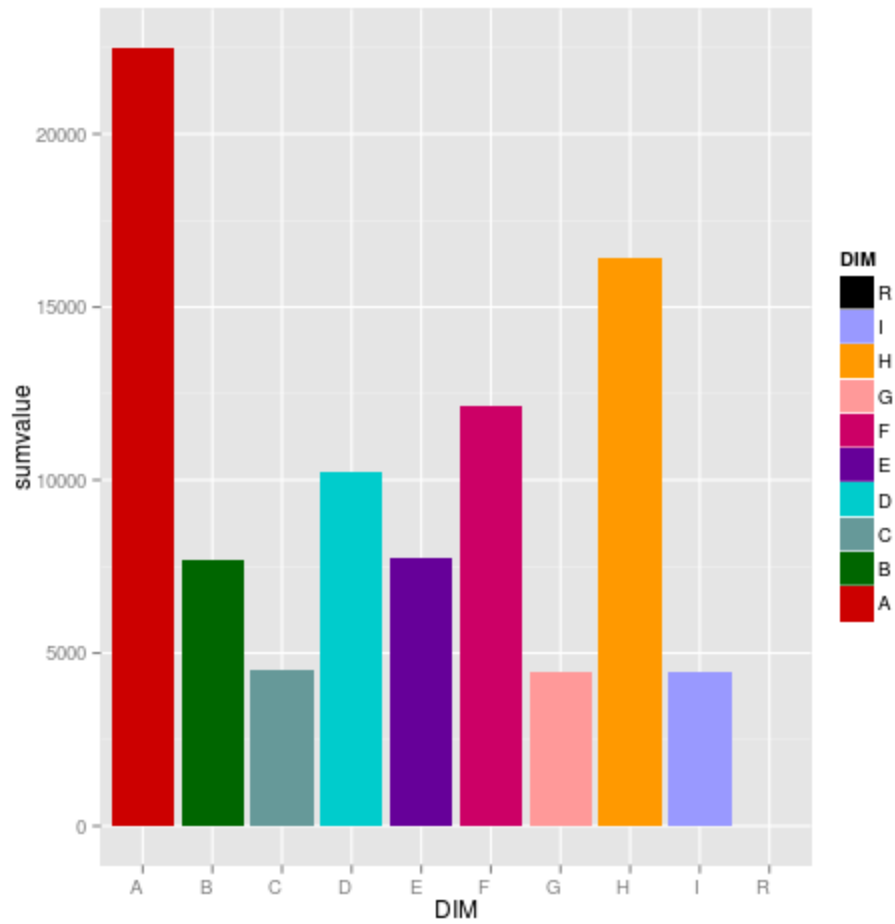
Ok... But it lacks colour and I the labels are obscure...

Let's add colour !



Let's click on the edit plugin icon (see explanations before in order to enable direct plugin editing). We choose the SAME fill than x (a different fill would stack different colours).

And save....



Better !

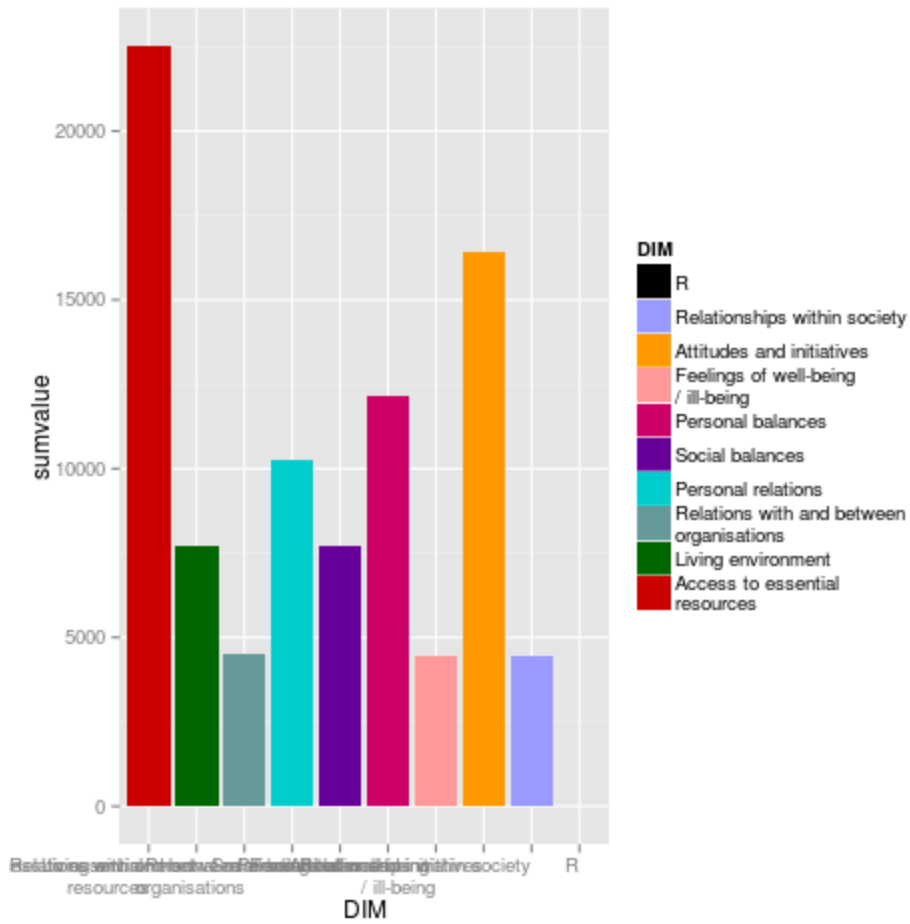
Let's put readable text !

Text labels for x and fill :

x labels

fill labels

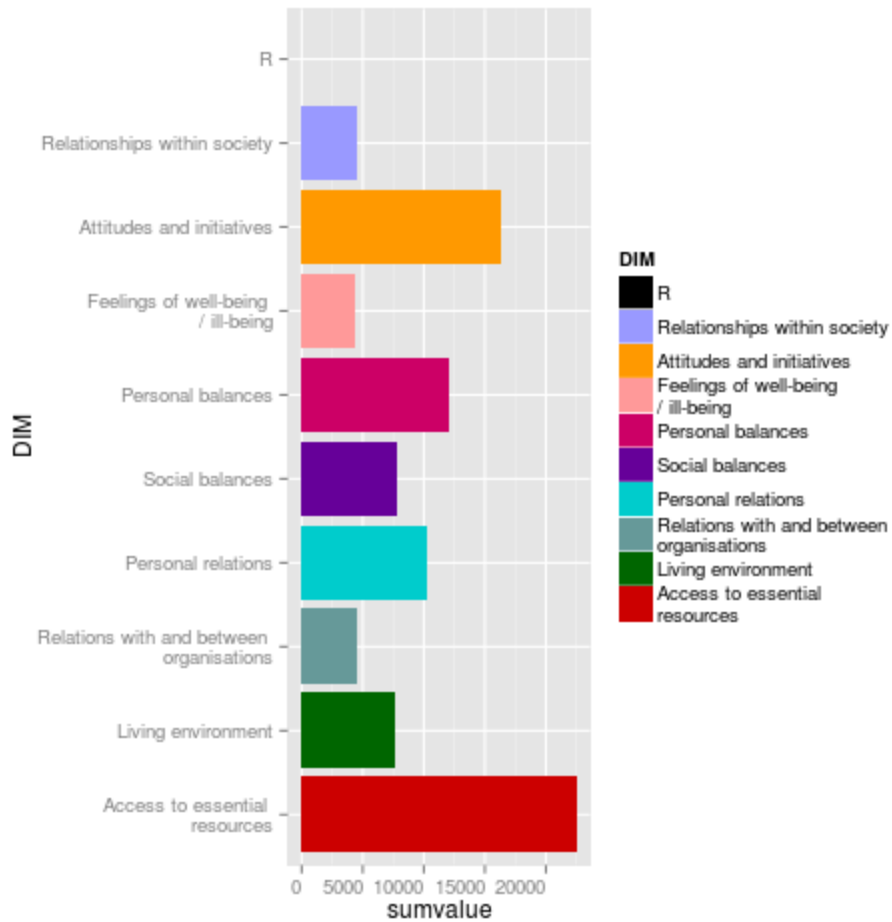
Gives us:



There's not enough space for x labels ! Let's correct this : scroll until you see flip coordinates and let's flip those horizontally.

Flip coordinates

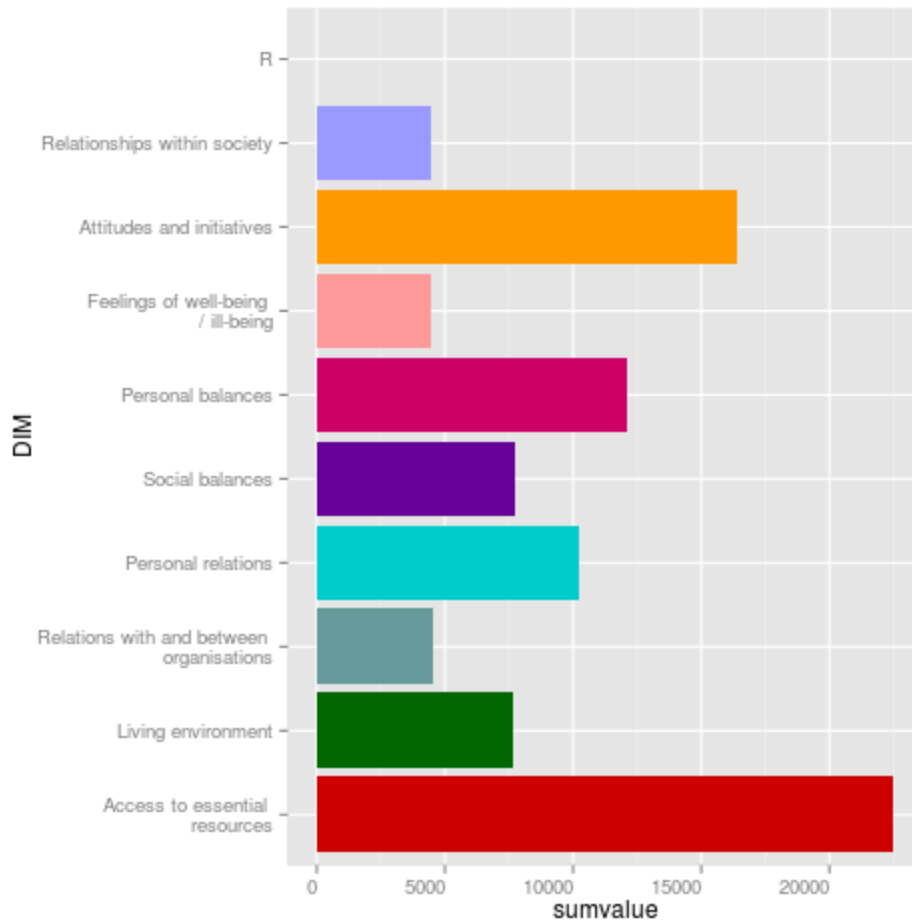
Gives :



Better, but the labels are repeated and showing to the left... You might at this stage consider giving a bigger width to the picture... But let's just remove the labels.

Show Fill Guide ▼

Gives :

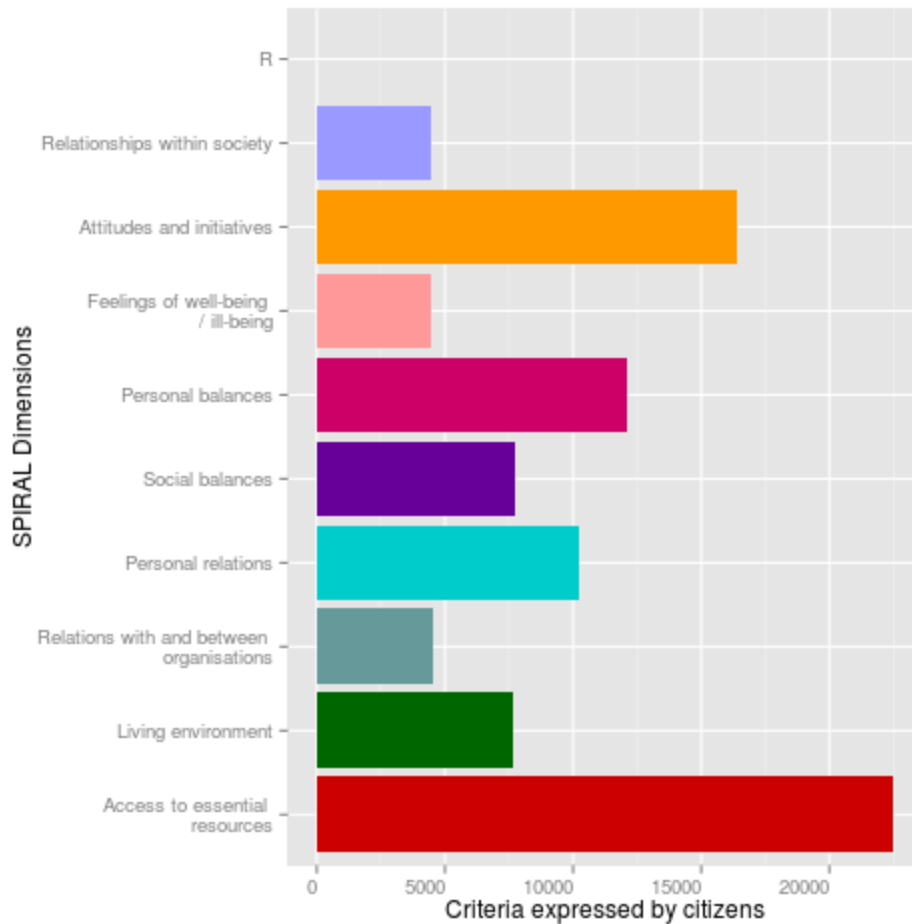


Let's change labels !

Scroll until you find xlab and ylab

xlab	SPIRAL Dimensions
	xlab
ylab	Criteria expressed by citi
	ylab

Write new labels to your convenience:



... Better ! We could at this step increase a bit the text size and orientation with the options around the end of the menu, but let's focus on filtering out our data to show what the youngsters in Mulhouse have said !

First, let's speak about the "R" dimension : it is the dimension that is meant for removal of criteria. So actually, when you filter out the results to your own database, it shouldn't appear or you should remind SPIRAL team to remove your criteria that you have marked for removal with indicator "R00".

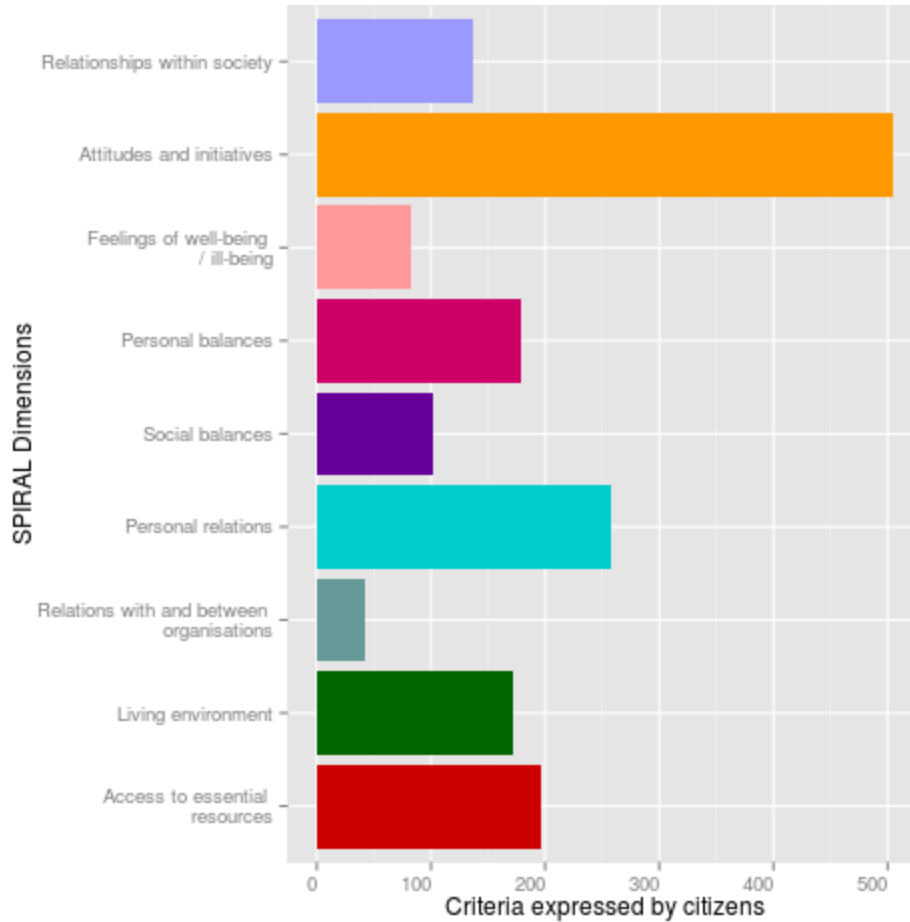
Subsetting : Filtering out the results

Let's filter out criteria from mulhouse only :

Choose first filter	CG <input type="button" value="v"/> Reduce scope of statistics.
Choose value of first filter	Mulhouse Any text used as filter, or the special value "CGname" for the default Coordination Group name of the page. Multiple values separated by . All matches are displayed (OR operator)


Please select **CG** - as coordination group, or plat-form. This is the way to select a Plat-form, or Coordination group.

This gives us that :

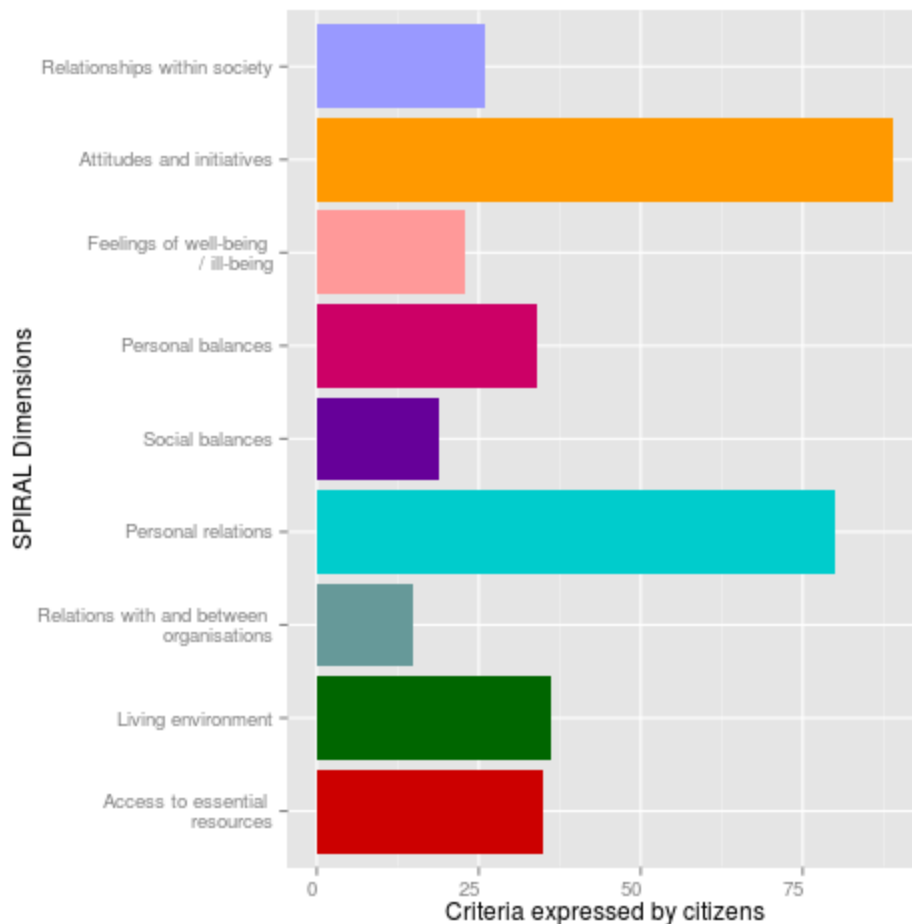


You see that R has disappeared, and that the criteria count has drastically decreased and that the repartition in the fdimensions is quite different!

Let's apply the last filter : we filter out the young people :

Choose second filter	<input type="text" value="agegroup"/>  Reduce scope of statistics.
Choose value of second filter	<input type="text" value="Teenagers"/> Any text used as filter, or the special value "CGname" for the default Coordination Group name of the page. Multiple values separated by . All matches are displayed (OR operator)

Two red arrows point to the 'agegroup' dropdown menu and the 'Teenagers' text input field.



You see that there is more focus here on personal relations for the younger people.

Hooray ! You've done it ! We are at the end of this first example so far. But let's give some more useful information.

Error messages in red

```
The following `from` values were not present in `x`: A, B, C, D, E, F, G, H, I
Error in eval(expr, envir, enclos) : object 'sumvalue' not found
Calls: print ... unlist -> lapply -> eval.quoted -> lapply -> FUN -> eval
Execution halted
```



Ouch I just have got this ! What happened ??? Not fun !

Don't stress, stay calm. Most of the errors showing this message are there because of filtering out the database a bit "too strongly". Meaning that you have applied such a combination of filters that actually the resultant data is **EMPTY**. So R complains of not finding any data to proceed ! Here, in order to find the solution you have to step back, removing your filters and reapplying those until you know which filter is causing the error. Then there are several explanations :

- **Misspelling** : did you write your filter term with ptopoer spelling, including lower/upper case, spaces, etc. See to the end of this message a reference for all the spelling rules for the filters.

- **Search term not included in the filter field** : for instance you do not use the entire name for your homogenous group, or you use "Young people" instead of "teenagers"... See the guide at the end in order to know more.

- **Wrong combination of filters** : You use two filters together, such as teenagers ("Teenagers" in filter 1) from northern neighborhood (list of HGs separated by | in the second filter), BUT actually there are no groups flagged in the teenagers agegroup in this area.

Table view :

Before going into a more elaborate example, let's play a bit with the data. Also, if you want to do your own brew of the results, you can just copy and paste this in another software, using Table view :

Display Type	table ▼ Choose the output type.
--------------	------------------------------------

This is a html table that you can select, copy and paste in any third party software in order to reuse the data.

	DIM	Freq
1	Access to essential resources	35
2	Living environment	36
3	Relations with and between organisations	15
4	Personal relations	80
5	Social balances	19
6	Personal balances	34
7	Feelings of well-being / ill-being	23
8	Attitudes and initiatives	89
9	Relationships within society	26

2 - A more elaborate example :

Comparison of Timisoara, Mons and Mulhouse criteria addressing well-being and ill-being questions for the Teenager group.

We will start from the last example, and study essentially two new options : cumulating several filters, and faceting.

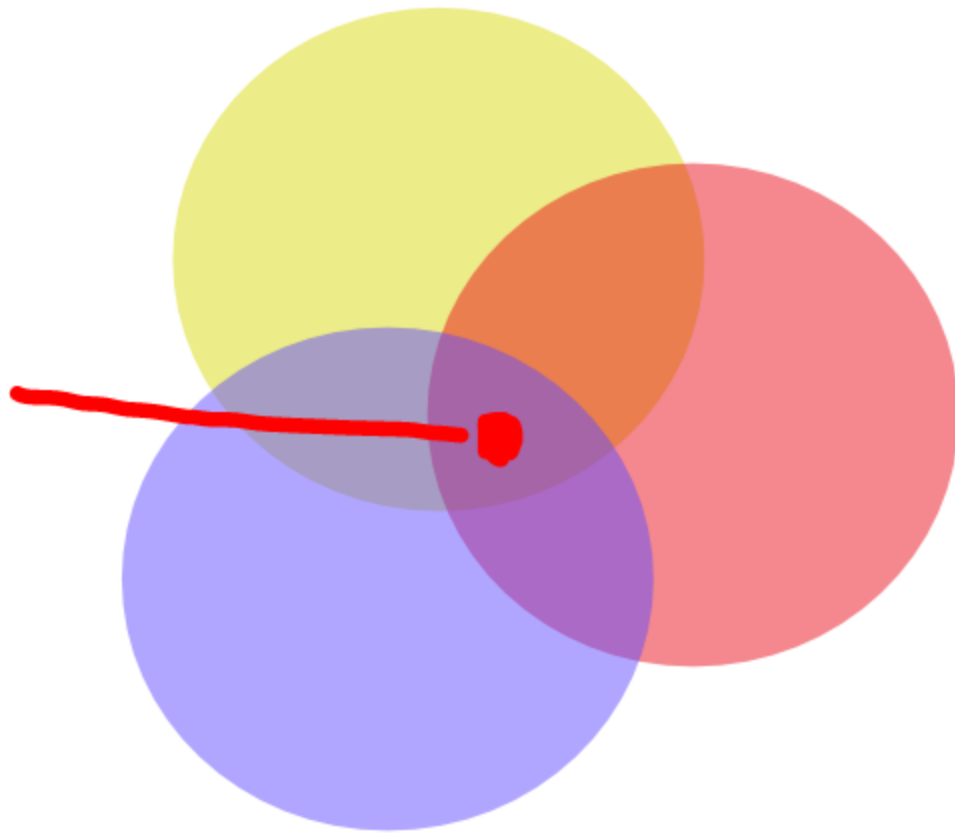
Let's see what we already have (just revert the display type to graph) :

Display Type	graph ▼ Choose the output type.
x (abscissa)	DIM ▼ Column shown on abscissa (horizontal axis)
x labels	text ▼ Display labels as short code or as longer text
y (ordinate)	nbexpress ▼ Column shown on ordinate (vertical axis). Leave empty if you want graphs on other items than criteria (using stat=bin, counting elements, not summing nbexpress)
fill	DIM ▼ Column shown on fill
fill labels	text ▼ Display labels as short code or as longer text
Choose first filter	CG ▼ Reduce scope of statistics.
Choose value of first filter	Mulhouse Any text used as filter, or the special value "CGname" for the default Coordination Group name of the page. Multiple values separated by . All matches are displayed (OR operator)
Choose second filter	agegroup ▼ Reduce scope of statistics.
Choose value of second filter	Teenagers Any text used as filter, or the special value "CGname" for the default Coordination Group name of the page. Multiple values separated by . All matches are displayed (OR operator)

Cumulating filter terms

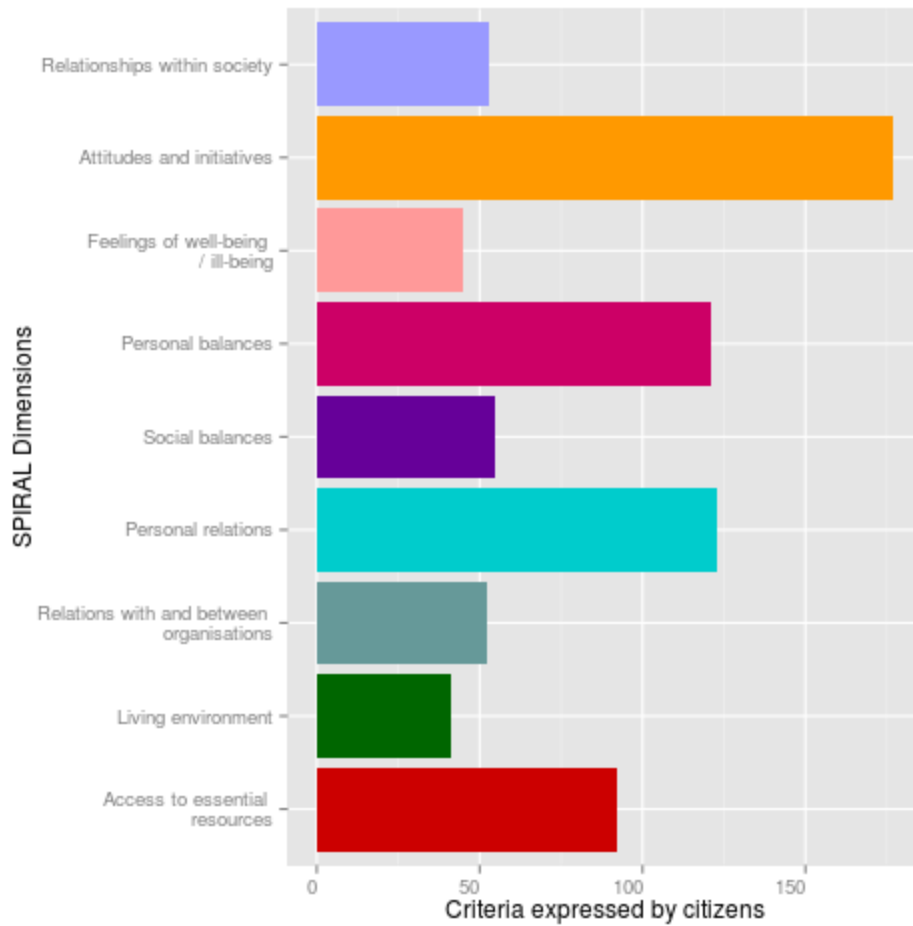
Let's start by adding Timisoara and Mons to Mulhouse. First you have to know that you can cumulate an almost indefinitely number of filters. There are only three rules to remember :

- You cannot combine in a same filter (like in the filter 1) differents requests, like the name of a coordination group and the name of an homogenous group.
- You must use the symbol | (vertical bar, or pipe) to separate the requests. The meaning of this symbol is OR, and it add the results of the filter options. If you don't know how to find it on the keyboard, just copy the symbol from the explanation text in the menu or from this mail.
- You have then three filters, that enable you to restrict the results shown. Those three filter combine with a AND logical function, meaning that the results will be in the intersect of those filters like in the following schema :



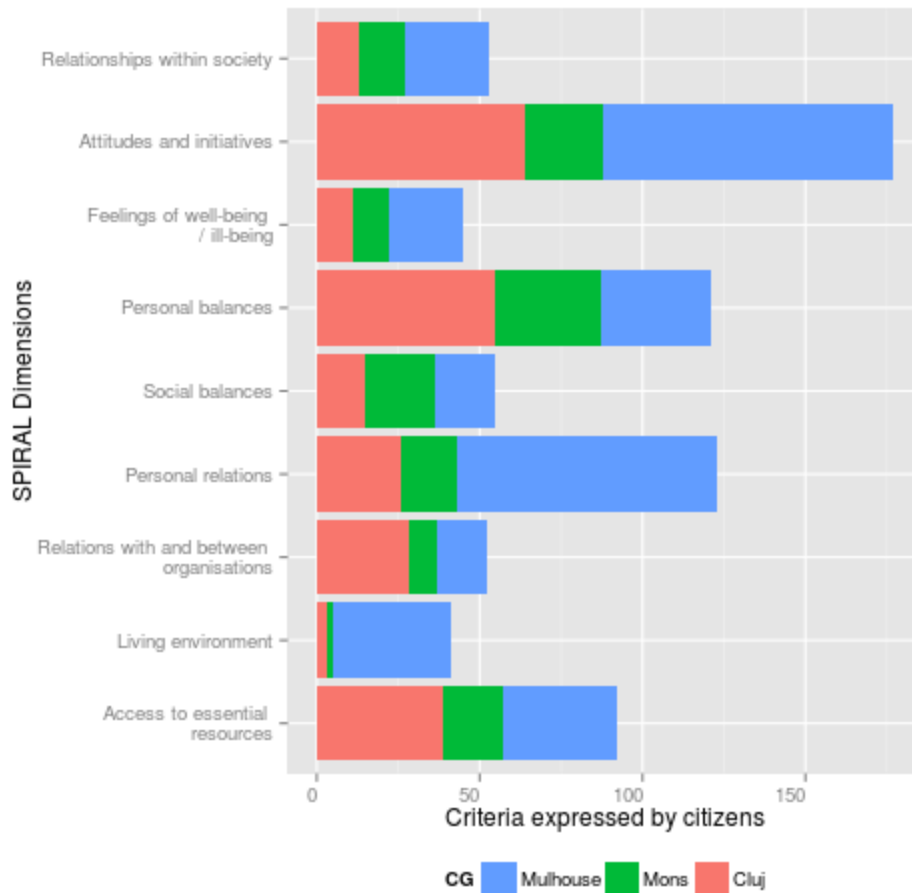
Let's add two more Coordination Groups, or SPIRAL Plat-Forms, to the first filter :

Choose first filter	<input type="text" value="CG"/> <input type="button" value="v"/> Reduce scope of statistics.
Choose value of first filter	<input type="text" value="Mulhouse Cluj Mons"/> Any text used as filter , or the special value "CGname" for the default Coordination Group name of the page. Multiple values separated by . All matches are displayed (OR operator)



You can see that the criteria count has increased, but this is useless !!! We want to be able to compare the results, so we have to distinguish those somehow. There are two options : changing the fill to CG, like this :

fill	<input type="text" value="CG"/> <small>Column shown on fill</small>
------	--



But it is not really readable either. Let's use faceting instead. First revert back the fill to DIM.

Faceting

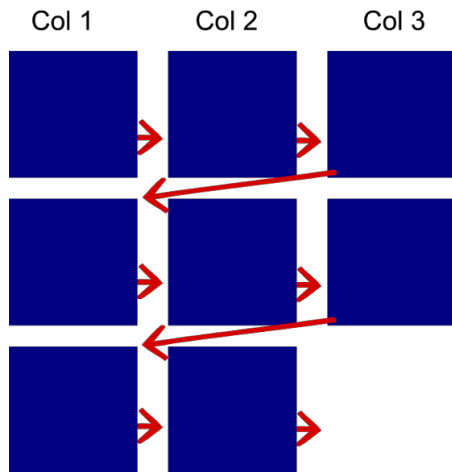
Faceting is the capacity to split a graph (or plot) into several sub-plots. What interests us here is to add a sub-plot per Coordination Group.

Let's give some general information first : There are two forms of faceting :

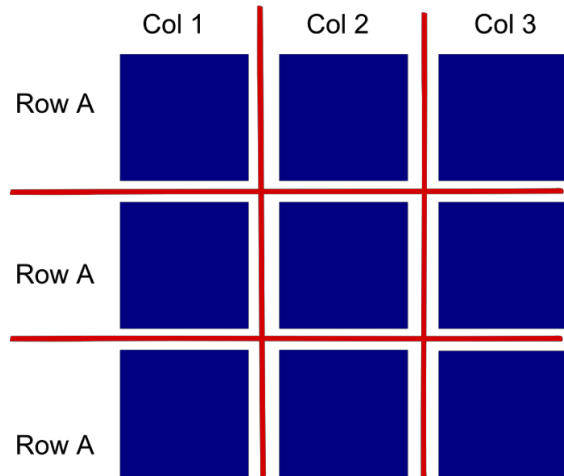
Wrap faceting : this one uses only one parameter, and then you choose the number of columns you want in order to wrap your results.

Grid faceting : This one uses two parameters and builds up a grid in two dimensions : as many columns as there are entries in the first parameter, and as many lines as there are entries in the second parameter.

Facet wrap



Facet grid



When you combine this with the fill, this can provide plots with a combination of three variables, but please mind the fact that you need to keep the resulting graph comprehensible and not turn it into a huge steam factory out of a steampunk movie.

Let's use one faceting parameter for a starter : the CG value (coordination group)

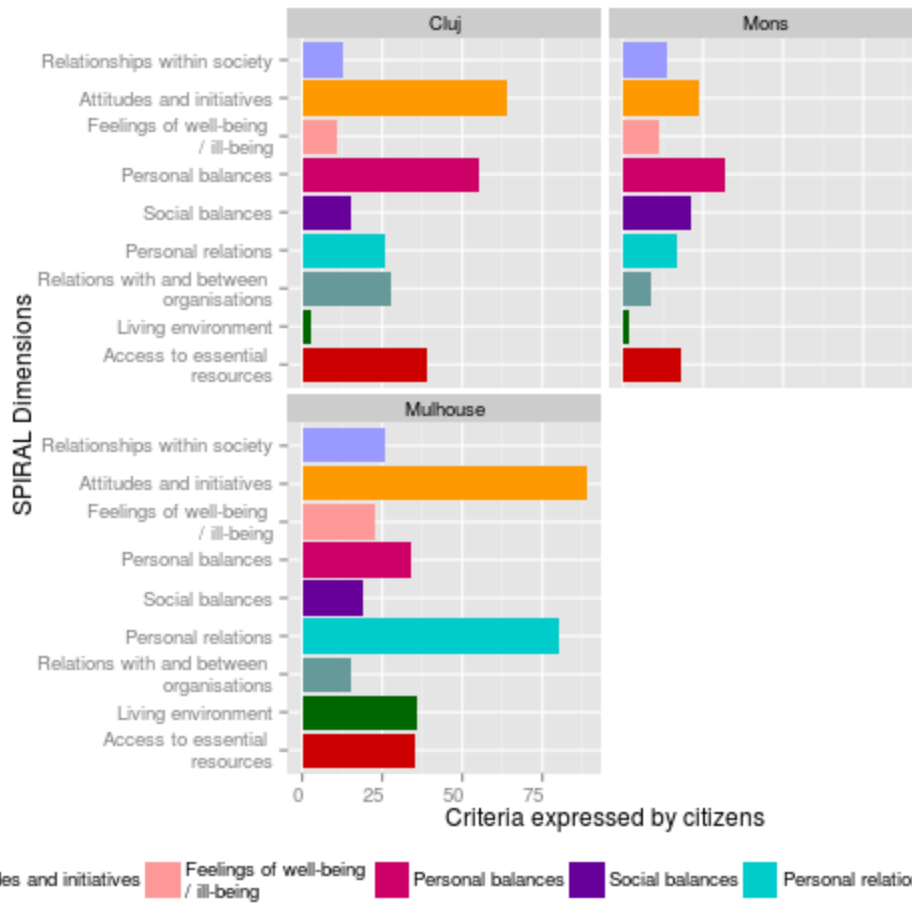
Faceting	1 parameter and columns (wrap) <input type="button" value="v"/> Splitting a plot into many plots
First faceting parameter	CG <input type="button" value="v"/> In case of 1 faceting parameter, this is the parameter we split by. In case of 2 faceting parameters, this is the vertical split. This parameter is ignored in case there is no faceting.
First faceting parameter labels	code <input type="button" value="v"/> Display labels as short code or as longer text

Gives this :

Missing parameters for faceting option 🌱

Oopsie !!!! I have forgotten to **state the number of columns for the wrapping** !

Number of faceting columns	2 <input type="text"/> In case of 1 faceting parameter, this is the numeric value of the number of columns. This parameter is ignored in case there is no faceting or 2 faceting parameters.
----------------------------	---



Here we go ! Now we can compare ! But it is a bit small... Let's make it bigger :
 Go to the top of the menu to enter a width :

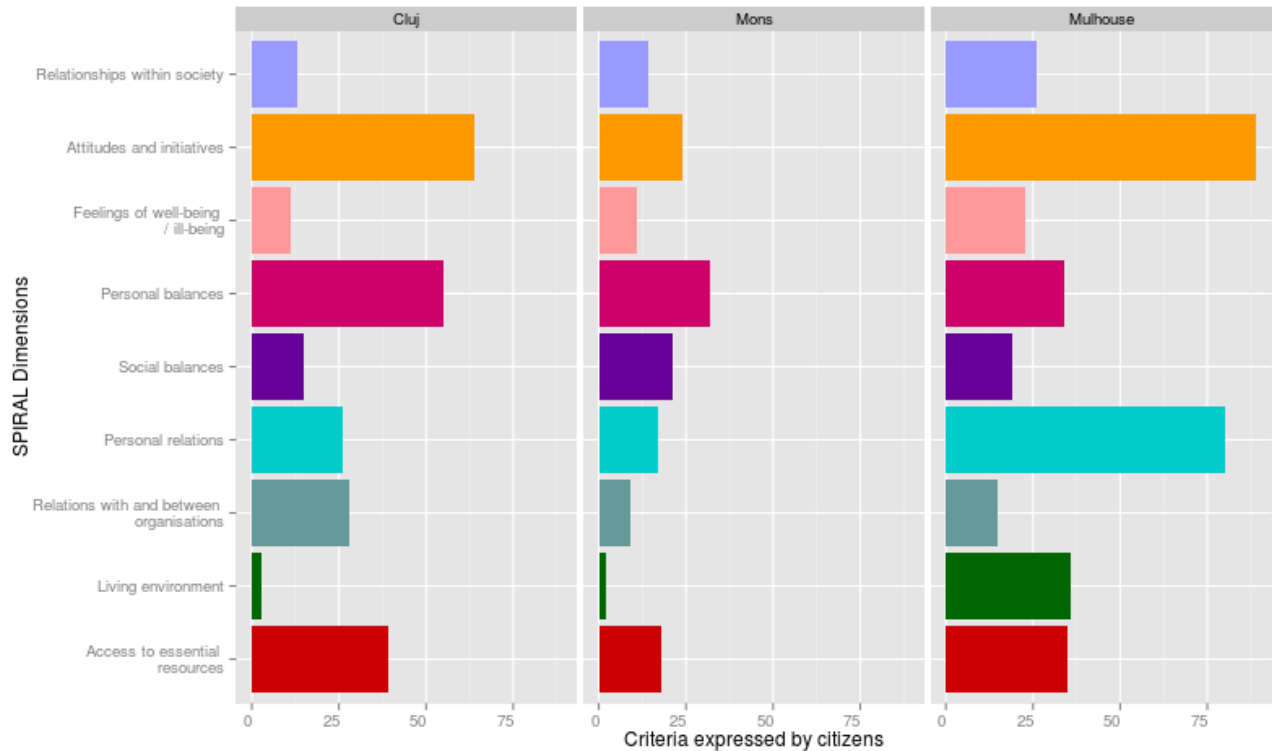
width	<input type="text" value="800"/> Width of the graph (Optional). Options: an integer number in pixels (default) or in units specified. If omitted but height is set, width will be proportional to keep aspect ratio
-------	--

But then, the image stays the same ?

Caching and cache bug

This is due to the basic caching behaviour : when there is no change in the plugin formula (like for instance the number of columns to wrap the facets), the system keeps the same image even if there is a change in the width and height. This is a nasty bug and we are currently building a plugin that gives a page refresh option. Then, you can overcome this either by [asking a system refresh](#) which will clean the caches for statistics updating of the plots, or by changing a value in your graph to force a recalculation. Here let's change the number of faceting columns to 3 :

Number of faceting columns	<input type="text" value="3"/> In case of 1 faceting parameter, this is the numeric value of the number of columns. This parameter is ignored in case there is no faceting or 2 faceting parameters.
----------------------------	---



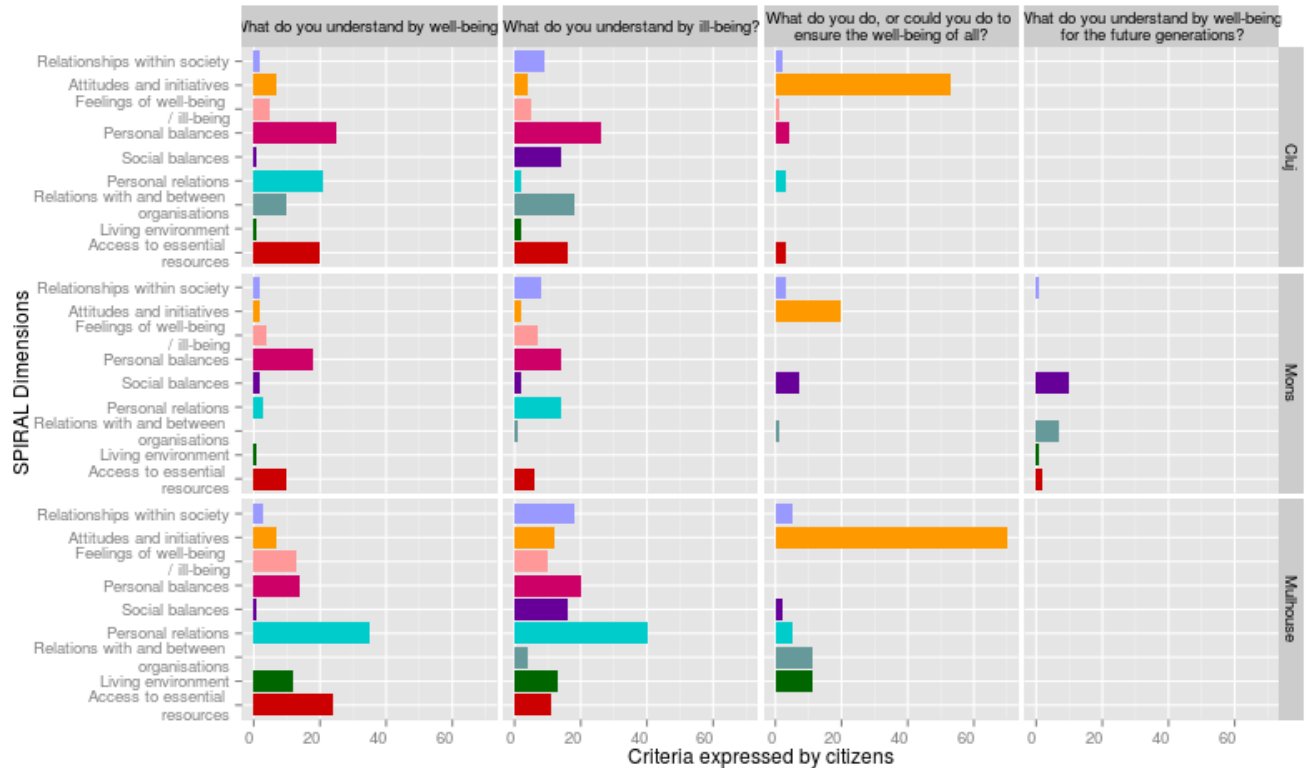
Really better looking !

Let's go to the next step: showing the answers to the questions asked.

Grid faceting

An approach could be to use the grid faceting. Let's choose faceting grid, and the nature of the horizontal variable :

Faceting	2 parameters (grid, tabular) <input type="button" value="v"/> Splitting a plot into many plots
First faceting parameter	CG <input type="button" value="v"/> In case of 1 faceting parameter, this is the parameter we split by. In case of 2 faceting parameters, this is the vertical split. This parameter is ignored in case there is no faceting.
First faceting parameter labels	text <input type="button" value="v"/> Display labels as short code or as longer text
Horizontal faceting parameter	question <input type="button" value="v"/> In case of 2 faceting parameters, this is the horizontal split. This parameter is ignored in case there is no faceting or 1 faceting parameter.
Horizontal faceting parameter labels	text <input type="button" value="v"/> Display labels as short code or as longer text
Number of faceting columns	3 <input type="text"/> In case of 1 faceting parameter, this is the numeric value of the number of columns. This parameter is ignored in case there is no faceting or 2 faceting parameters.



Here you can see what faceting grid is doing : it is building a grid with each question as a column and each coordination group as a row. Note that the number of faceting columns (used for facet wrap) value is ignored here, so ne need to delete it.

But, to my opinion, even if this looks OK, it is a bit impractical to read. Let's find another way of doing this.

First, revert back to faceting wrap with 3 columns:

Faceting	1 parameter and columns (wrap) <input type="button" value="v"/> Splitting a plot into many plots
First faceting parameter	CG <input type="button" value="v"/> In case of 1 faceting parameter, this is the parameter we split by. In case of 2 faceting parameters, this is the vertical split. This parameter is ignored in case there is no faceting.
First faceting parameter labels	text <input type="button" value="v"/> Display labels as short code or as longer text
Horizontal faceting parameter	<input type="button" value="v"/> In case of 2 faceting parameters, this is the horizontal split. This parameter is ignored in case there is no faceting or 1 faceting parameter.
Horizontal faceting parameter labels	text <input type="button" value="v"/> Display labels as short code or as longer text
Number of faceting columns	3 <input type="text"/> In case of 1 faceting parameter, this is the numeric value of the number of columns.

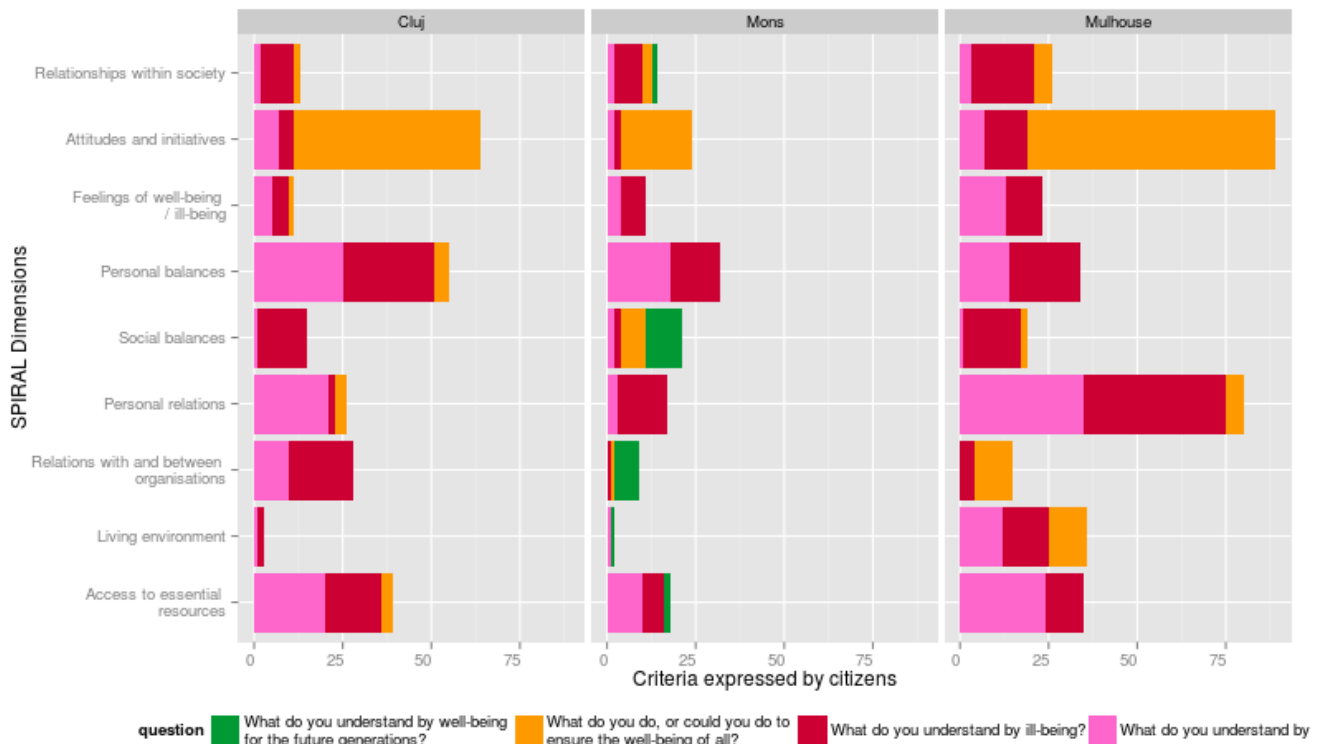
Reducing the results by excluding a term

Let's use the colouring as another alternative. Let's change the fill variable:

fill	question <input type="button" value="v"/> Column shown on fill
fill labels	text <input type="button" value="v"/> Display labels as short code or as longer text

Let's also put back the fill guides, because in this case the fill will be a new variable, and not the same as DIM (the dimension variable).

Show Fill Guide	Display bottom <input type="button" value="v"/> Display the coloring guide.
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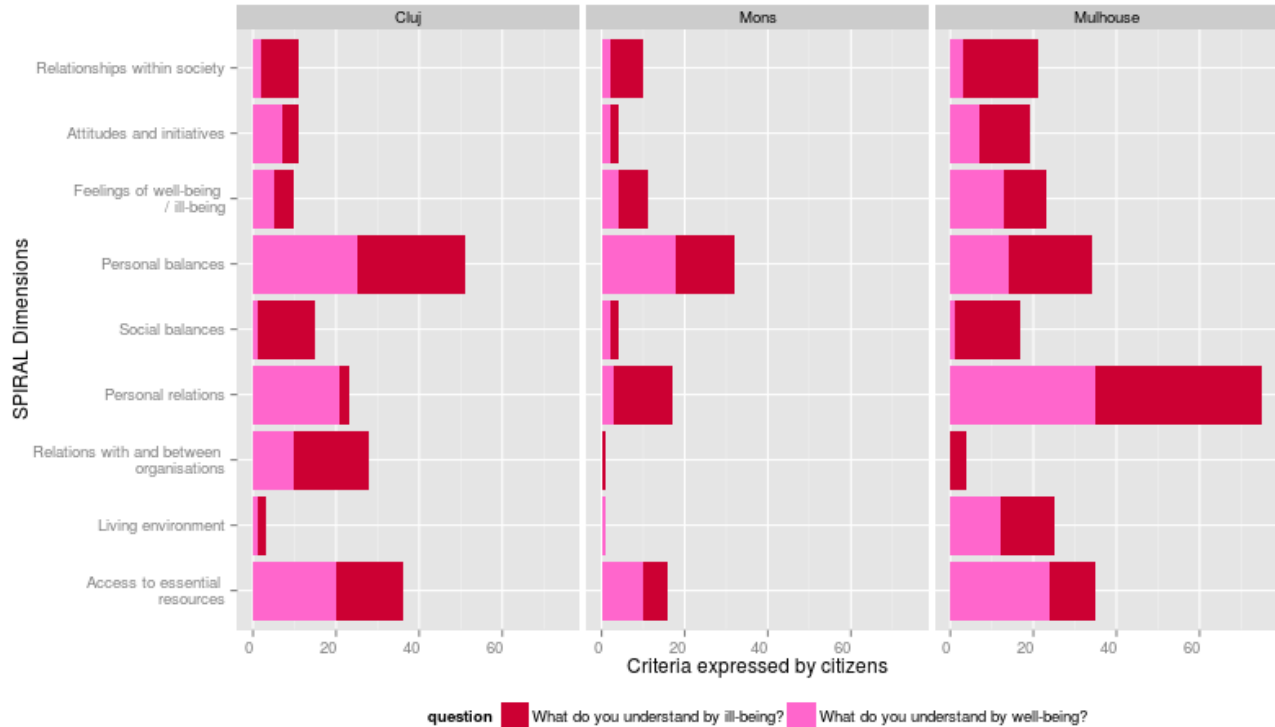


This looks nice! But then, the fourth question (green) and the third question (yellow) adds noise to the graph. Let's REMOVE them by excluding a term.

How to exclude a term or in this case several ones ?

First you need to know that there is no option in order to exclude. You have to make the exclusion of a term positively, meaning by listing the remaining items you want. In this example, you have to list the remaining questions. The questions in the database are noted in the form of their code : WB IB ACT FG. So we have all the info we need to proceed!

Choose third filter	question <input type="text" value="question"/> Reduce scope of statistics.
Choose value of third filter	WB IB Any text used as filter, or the special value "CGname" for the default Coordination Group name of the page. Multiple values separated by . All matches are displayed (OR operator)



This looks way better now !!!

... It is such a pity that Young people refer to the society (Relationships within society, Social balances, Organisations) in such negative terms.

Reference of all the options

Here are all the options available to use in the spiralstatsfilter plugin. Please note that these are not the ONLY options, just a selection we made. You can request for more options, there are just a few limits. Especially, I can see some more options in order of elements, or in colors and settings.

Variables and values available:

Here is an explanation of all the values that are available in the drop-down menus as variables for the graph display and as filtering parameters.

country

See the list of available countries here :

<https://wikispiral.org/tiki-index.php?page=Territories+of+coresponsibility>

territory

Warning, territory is not equal to the territory of coresponsibility. **Use CG instead !** The list of territories is available [here](#).

critere

The criteria. This enables to output tables with the criteria that are corresponding to the filters.

CG

The coordination group, or SPIRAL plat-form.

HGid

A numeric value without current use.

HG

The full name of the homogenous group. To find this name please go in the dashboard of the corresponding Coordination Group. Example : "Mulhouse : Résidence violette schoen". The full name of the homogenous group always includes the name of the coordination group and this separator: " : "

nbmen

The number of men in the group. Numeric data.

nbwomen

The number of women in the group. Numeric data.

feminity

The balance between men and women. Not in use currently - to be built further.

agegroup

Groups of ages, to define in the characteristics of your homogenous groups.

Values : "Teenagers" "Young Adults" "Adults" "Senior" "Children"

HGtype

Complex attribution of typology to the homogenous groups. Needs to be refined.

Actual values are available in this page :

<https://wikispiral.org/tiki-index.php?page=Types+of+homogenous+groups>

question

The code of the question : WB, IB, ACT, FG.

nbexpress

The "quantity" of the criteria : how many times a given spelling of a criteria has been counted per homogenous group per question. To **use as y value**.

IND

The code of the Domain, or Indicator, such as A01, B06, ..., I08.

For a complete list of indicators and their meaning please see here :

<https://wikispiral.org/tiki-index.php?page=Determination+key>

DIM

The code of the dimension or Family, such as A, B, C, ... I.

For a complete list of dimensions and their meaning please see here :

<https://wikispiral.org/tiki-index.php?page=Determination+key>

CAT

The code of the category.

For explanations and a complete list please see here :

<https://wikispiral.org/tiki-index.php?page=Code+sens>

beneficiary

For explanations and a complete list please see here :

<https://wikispiral.org/tiki-index.php?page=Code+bénéficiaire>

meaning

For explanations and a complete list please see here :

<https://wikispiral.org/tiki-index.php?page=Code+Objet>

category : Out of use

mean22 :

mean33

objet

obj11

obj22

obj33

For further uses. No in use yet.

proposition

A simple phrase that summaries the criteria given its attribution, Please check your database for a list of propositions.

Table of spiralstatsfilter options:

echo

Show a code block with the R commands to be run before running them (similarly to the echo command)

This is more a debug option (to show the actual R code in conjunction with the advanced option echo debug), you can ignore it.

width	<p>Width of the graph (Optional). Options: an integer number in pixels (default) or in units specified. If omitted but height is set, width will be proportional to keep aspect ratio</p> <p>Example : 800 -> will, once the caches are refreshed, put your resulting picture 800px wide.</p>
height	<p>Height of the graph (Optional). Options: an integer number in pixels (default) or in units specified. If omitted but width is set, height will be proportional to keep aspect ratio</p> <p>Example : 1200 -> will, once the caches are refreshed, put your resulting picture 1200px tall.</p>
Display Type	<p>Choose the output type.</p> <p>You can either have a graph or a table.</p>
x (abscissa)	<p>Column shown on abscissa (horizontal axis)</p> <p>Required value : this is the first variable to distribute your data in a plot. For instance : DIM, to use the nine dimensions of SPIRAL Indicators in order to build a bar plot of nine bars.</p>
x labels	<p>Display labels as short code or as longer text</p> <p>You can either display a code (like WB, A02, ...) or the proper text. There are translations for French and english, but there can be more done on request.</p>
y (ordinate)	<p>Column shown on ordinate (vertical axis). Leave empty if you want graphs on other items than criteria (using stat=bin, counting elements, not summing nbexpress</p> <p>Use nbexpress (number of expressions of the same spelled criterion expressed by group and by question). We will build some other options, to available more uses, like the</p>

number of Coordination groups per country, etc.

fill

Column shown on fill

The fill adds coloring to your graph. It can either follow the x parameter value, or it can add a new parameter to produce a stacked bar with a legend for the coloring.

fill labels

Display labels as short code or as longer text

You can either display a code (like WB, A02, ...) or the proper text.

Choose first filter

Reduce scope of statistics.

You can filter by any variable : country, plat-form, number of women, homogenous group type, ... even by repetition of criteria (using nbexpress as value for the fill).

Choose value of first filter

Any text used as filter, or the special value "CGname" for the default Coordination Group name of the page. Multiple values separated by |. All matches are displayed (OR operator)

See "variables and values available" to have a complete list of values or codes available to filter the database. The values can be combined using the | (vertical bar or pipe) symbol, with a logical meaning of OR. Values add up.

Choose second filter

Reduce scope of statistics.

The second filter adds up to the first one with a AND logical meaning. It will only keep values which are TRUE for filter1 and for filter2. If the filters are mutually exclusive (like the selection of

a belgian cordination group (filter1) and the country France (filter2)), it will result in an error, because the filtered results are empty.

Choose value of second filter

Any text used as filter, or the special value "CGname" for the default Coordination Group name of the page. Multiple values separated by |. All matches are displayed (OR operator)

See "variables and values available" to have a complete list of values or codes available to filter the database. The values can be combined using the | (vertical bar or pipe) symbol, with a logical meaning of OR. Values add up.

Choose third filter

Reduce scope of statistics.

Same as second filter

Choose value of third filter

Any text used as filter, or the special value "CGname" for the default Coordination Group name of the page. Multiple values separated by |. All matches are displayed (OR operator)

Same as Value of second filter

Order of colors for stacked bar plot

Sort database to order colors for stacked bar plot

Order of the database either in alphabetical or in values order. To sort from A to B or from smallest to biggest bar. For now works only in the fill variable.

Faceting

Splitting a plot into many plots

You can use this option to split your plot into sub-plots following one or two variables. There will be a new plot for each different value that this variable take in your data selection, for instance, each different age

group, or each different homogenous group, or each dimension, depending on the variable you use.

Facet wrap uses one variable and a number of columns (1, 2, 3, ... plots per row) as parameters.

Facet grid uses two variables and creates a grid, for instance with as many rows as they are homogenous groups and as many columns that they are questions (4).

First faceting parameter

In case of 1 faceting parameter, this is the parameter we split by. In case of 2 faceting parameters, this is the vertical split. This parameter is ignored in case there is no faceting.

Select there a variable in the list as your first parameter for faceting, then in the next options give a number of columns (facet wrap) or a second variable (facet grid).

First faceting parameter labels

Display labels as short code or as longer text

You can either display a code (like WB, A02, ...) or the proper text. There are translations for French and english, but there can be more done on request.

Horizontal faceting parameter

In case of 2 faceting parameters, this is the horizontal split. This parameter is ignored in case there is no faceting or 1 faceting parameter.

To use with facet grid. Second variable used for faceting, this will give the width of the graph in number of columns. Please choose a variable with fewer columns to keep it readable.

Horizontal faceting parameter labels

Display labels as short code or as longer text

You can either display a code (like WB, A02, ...) or the proper text. There are translations for French and english, but there can be more done on request.

Number of faceting
columns

In case of 1 faceting parameter, this is the numeric value of the number of columns. This parameter is ignored in case there is no faceting or 2 faceting parameters.

Depending of you data, choose 1, 2, or more columns to break you data.

Graph automatic
height calculation

In case of 1 faceting parameter, this ignores any previous height parameter and calculates height depending on the number of facets

Really useful when you don't know, in facet wrap, how many facets you will have. This wil automatically calculate for you the height of the picture depending of the number of facets. For instance if you have a facet per homogenous group... Still in testing option, to be developed further.

Show Fill Guide

Display the coloring guide.

Useful to hide the fill when it is the same as an other value (x, or faceting...)

Flip coordinates

Displays output bars horizontally.

Show bars and text of x variable horizontally. Useful when you do not use the code but the full text.

Free scales faceting

This enables to remove empty scales in facet grid or wrap. This might be useful if you want to show only the domains corresponding to the A dimension in the A dimension facet. The empty scales are dropped.

An option to remove empty values in faceting. Bar will grow larger.

Remove unattributed
criteria

Unattributed criteria are removed from the dataset before processing.

To not count criteria that are not attributed.

Basic text labels	Choose label size in pixels. Enter numbers only Size of the text
Title size	Choose title size in pixels. Enter numbers only
Title face	Choose title font face.
X label orientation	Choose X label orientation in degrees. Enter numbers only Useful when you have full text labels in order to not overlap the text.
xlab	xlab Write a custom text for x axis label
ylab	ylab Write a custom text for y axis label