Acqui 2015
Visual Reference Manual

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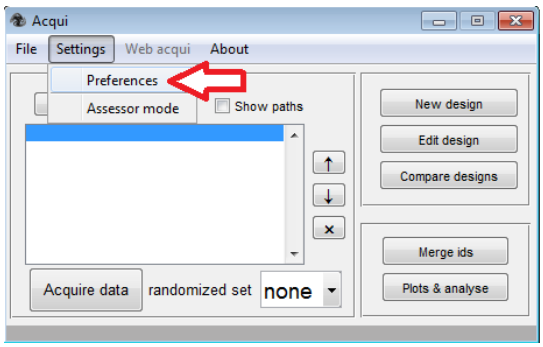
Setting the paths

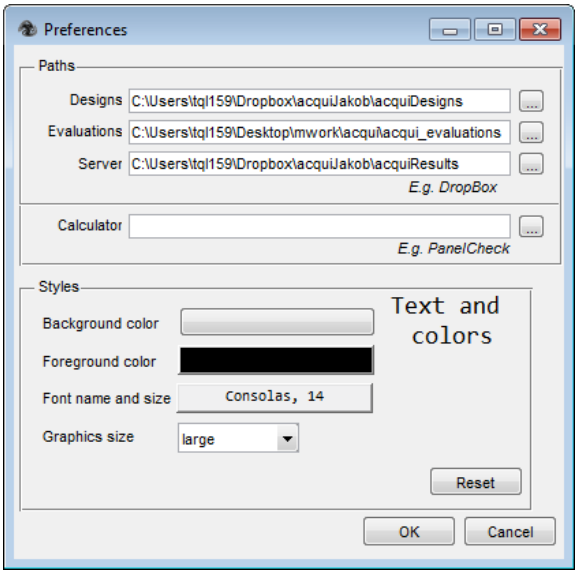
After installation of Acqui the paths where designs and results from acquisitions are by default:

> C:\Users\<account>\acqui_designs
>
> C:\Users\<account>\acqui_evaluations

These paths may be changed, though keep in mind that you can only use paths which you have write access to.



In the menu *settings/Preferences* paths are defined. If you use multiple computers for your projects you may by convenience use your dropbox to communicate designs to the computers and receive results back from other computers. Further below a more complete description is presented.

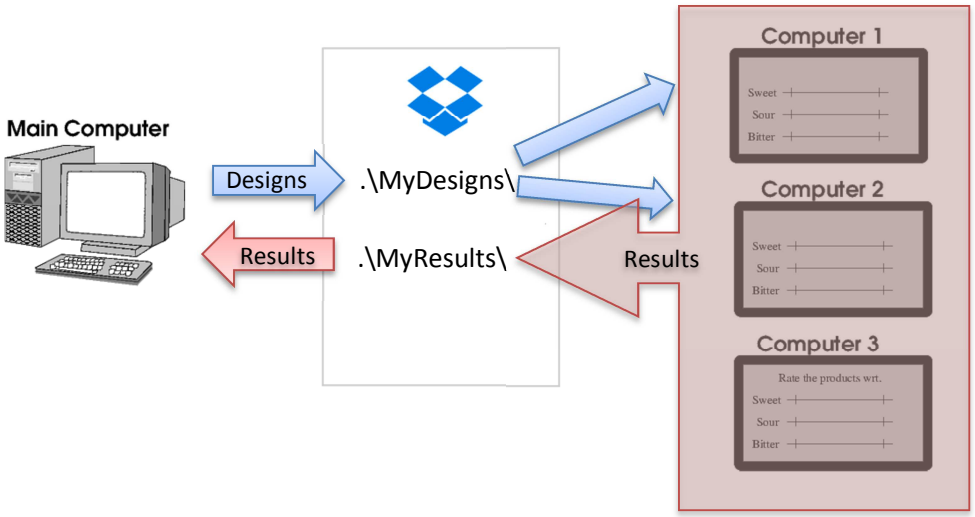


In the *Preferences* window some options for the typographic can be adjusted.
Graphics size, specify the size of buttons and scales.

For tablets the recommended size is “large” or “very large”.

Paths and Dropbox

When you make a change on in the designs you will automatically receive them on the small computers. Likewise, results acquired on the small computers will (almost) immediately be available on the main computer. Ready to be analysed !!



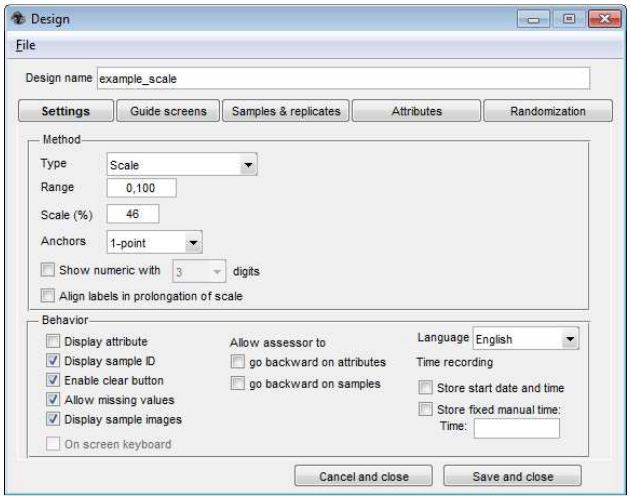
On the main computer:
Make folders for your designs and results
Install Dropbox on the other computers as well and login on the same account as on the main computer.
Alternatively, you may login with another account (account 2) on the small computers, and on the main computer (account 1) share the folders with account 2 on the small ones.

Note: Free dropbox accounts do not allow denying invited accounts to edit files.
Consequently, assessors may in principle (by accident) corrupt a design.

Designs

There are currently six types of designs available in Acqui. Design may be put in a sequence such that an experiment consists of several different kinds of designs. Such a grand design is made by adding the individual design into the list on the main acqui window. The grand design may be saved (and re-loaded later on) in the File menu. Grand design have extensions *.mlt, while the individual have extensions *.csv.
In the following each of the six types of design are described. To start a new design press the New Design button, which cause an default design window to appear.

Linear Analog Scale (VAS)

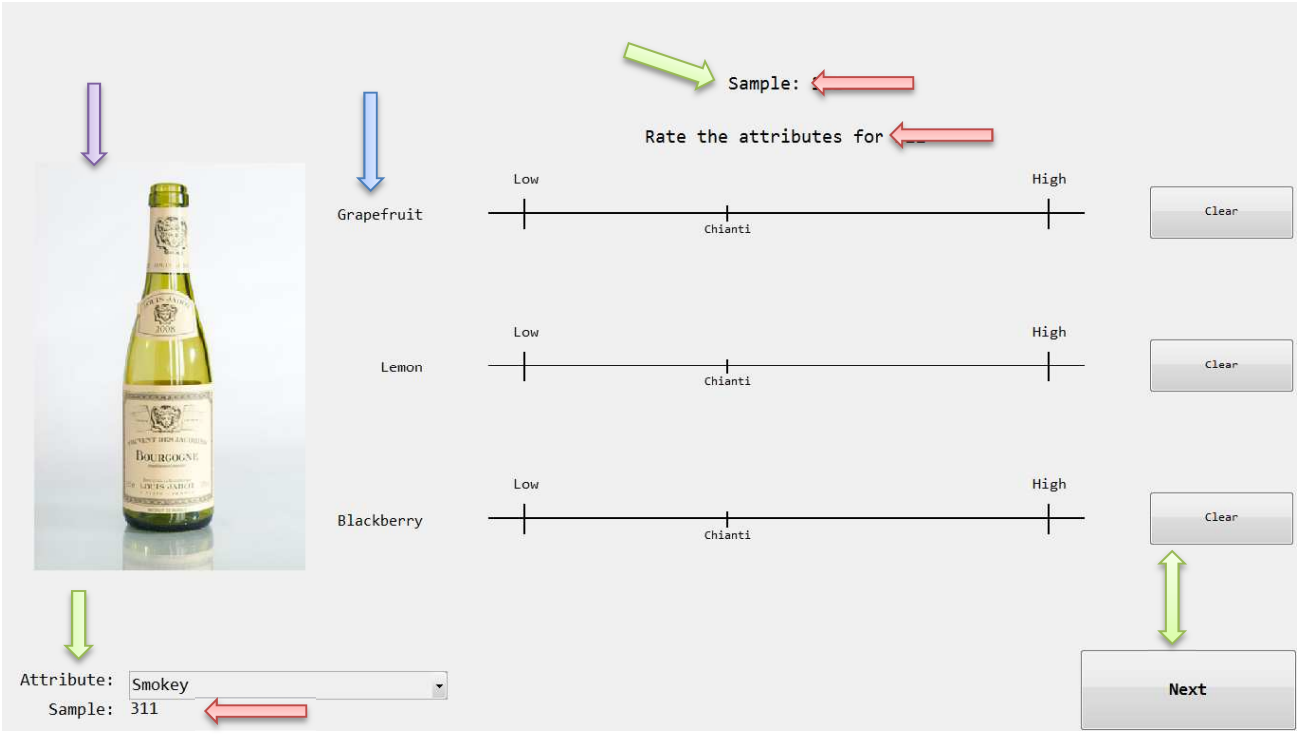


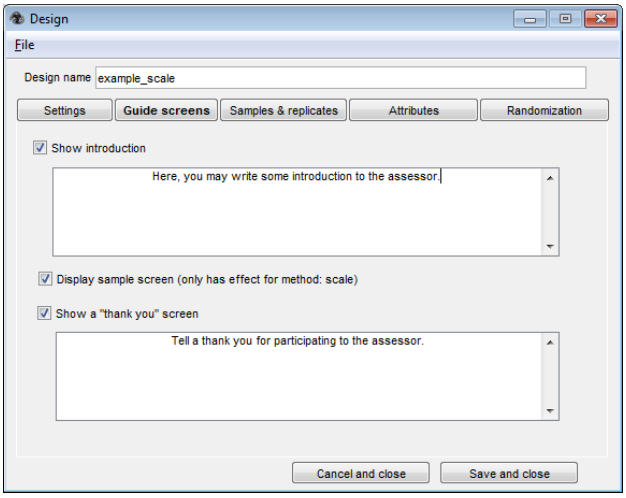
In the *Settings* tab,

- Select the type value to be Scale.
- Decide on the range of the scale (MUST start with zero)
- Decide the length of the scale as a percentage of the screen width (the width of the computers that will be used for acquisition, thus not necessarily the computer you use to make the design).
- Decide whether to display anchors and location of anchors.
- Location of anchor labels (either above anchors or in line with the scale).
- Decide whether the rating value should be visible for the assessor.

In the *Behavior* panel there are several options for modifying how graphics behave and what assessors should or should not be allowed to do.

- *Display attribute*: Shows the current attribute in the lower left of the screen. If in addition to this option also the *Allow to go back on attributes* is checked on then it is a dropdown from where the attributes can be selected.
- *Display sample code*: Obviously, this option should generally be checked on. It causes the sample code to be displayed in the top of the screen. Note: the code is always displayed in the lower left of the screen.
- *Enable Clear button*: Displays a clear button, giving the assessor the possibility to un-display the pointer, and possibly proceed to the next screen (if missing values are allowed).
- *Allow missing values*: If checked on, then the next button on the screen presented to assessor will always be enabled. Thus, the assessor can proceed, without assessing attributes.
- *Display sample images*: If checked on, and the samples names defined in the *samples & replicates* tab, also are pictures, then the pictures will be show on the left side of the scale(s). Oppositely pictures will not be shown even though there are pictures.
- *Allow to go back on attributes*: allow assessors to reconsider assessments of attributes on past screens. When allowing for this the lower left attribute indicator is a dropdown field.
- *Allow to go back on samples*: in addition to reconsidering attributes, this further allow for re-considering of samples. When allowing for this the lower left attribute indicator is a dropdown field. Note, all samples will be shown in the dropdown, samples that have not yet been served will be in red text.
- *Language*: Language on next button, ok button etc., but not of e.g. introductions text, guide text etc.
- Time recording:
  - *Save start date and time*: puts a time stamp in the result file for the moment when the design was started.
  - *Save fixed manual time*: puts a label of your own choice in the result file.



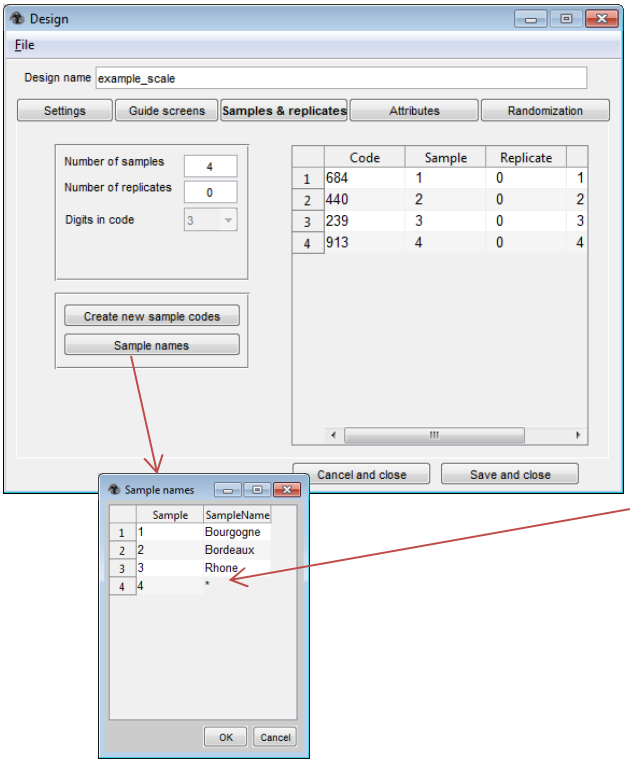


In the *Guide screens* tab,
An introduction to the experiment may be specified. Use \n to specify a new line
A sample screen may be shown to tell the assessor to prepare for the next sample. The sample code will be shown together with an OK button.
A thank you screen may also be shown to tell the assessor that this experiment is finish (and the next design in the list will start).

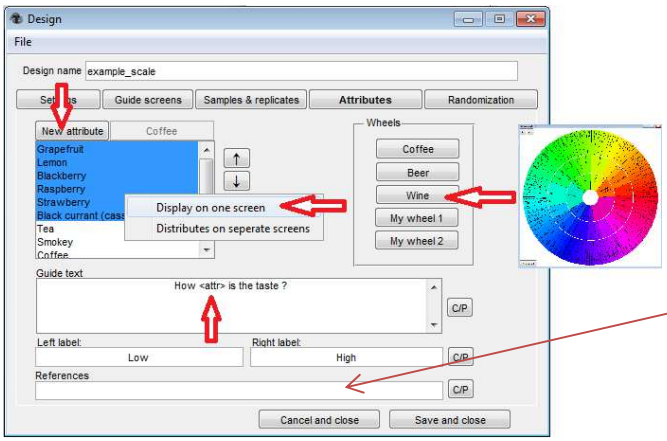
Supported text formatting in the Introduction and Thank you texts are:

Newline:	\n	If you have\na long line	If you have a long line
Bold face:	\bftext\rm	The \bftext\rm is in bold	The **text** is in bold
Italic:	\bftext\rm	The \ittext\rm is in bold	The *text* is in bold
Color:	\color{clr}another text\color{clr}	The \color{red}text\color{black} is red	The text is red

This formatting also applies to the guide text in the Attributes tab. Anchor labels are only subject to the \n (newline) format.



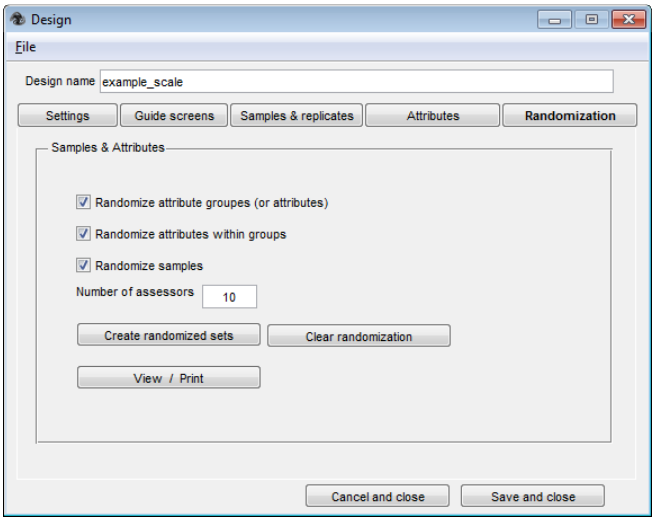
In the *Samples & replicates* tab,
Specify the number of samples and replicates
Press Create new sample codes. This will fill in the table to the right.
If you want to associate the samples with a sample name (e.g. the actual name of the product), you can do that by pressing Sample names.
If you in addition to a sample name also want to include a picture of the sample:
Type * and select an image. The sample name is then the filename of the picture you select.
The pictures are only presented to the assessor if the Display sample image checkbox is checked on.
The sample names are NEVER presented to the assessor, only pictures (if checked on).



Select/de-select attributes by clicking.
The sensory wheel can be rotated, by moving the mouse while clicking the white background.

In the attributes tab, attributes are selected/defined, either manually or via sensory wheels. A manually specified attribute is defined by, Pressing the new attribute button and type an attribute.
Specify a guide text, labels at anchors and references (e.g. chianti,40).
If you type <attr> in the guide text, the attribute in inserted automatically. Likewise <code> will insert the relevant sample code.
By default there is only presented one attribute and its scale on the screen. To display several scales, mark the relevant attributes, then right-click, select display on one screen and select a color that will representing the group.

IMPORTANT: when finished defining attributes, browser along the attributes list to check each guide text, labels and references



In case changes in the design cause the randomization to be invalid, the Create randomized sets button be red. You should then create a new set by pressing the button. The sequences that you might have saved or printed will then be out-dated.

In the *Randomization* tab there are options to randomize the design with respect to both attributes and samples.

In the present example the attributes are grouped into two groups. One group with 6 fruity attributes, and one group with other 3 attributes.

If the first option, *Randomize attribute groups* are checked on, then the two groups are presented randomly, while attributes in the groups is only randomly presented if the second option, *Randomize attributes within groups* also are checked on.

Specify the number of assessors you plan to use in the experiment and then press *Create randomized sets*.
A prior knowledge of the number of assessors improve the randomness of the sets, because the sets are sorted such that the variation is maximal Although not recommended random set may be used multiple times. This may become necessary if the experiment expand to cover more assessors than planned for.

Press *View/Print* to get a list of the sets. You will need the list for making labels to your samples. Below the first three sets generated are shown. The first column you can cut out of your printed list and put on your samples.

After randomization and printing all the sets, you should not press the randomize button again !!
This will abandon all your preparation regarding labeling of samples !!

A latin square randomization algorithm is used to create the sets. Further details on the randomization algorithm is described in a powerpoint *Randomization in acqui.*

Assessor #none (the un-randomized version)

Code	Code	Sample	Replicate	Sample name
972	972	1	0	Bourgogne
283	283	2	0	Bordeaux
749	749	3	0	Rhone
517	517	4	0	Chianti

Assessor #1

Code	Code	Sample	Replicate	Sample name
283	283	2	0	Bordeaux
972	972	1	0	Bourgogne
517	517	4	0	Chianti
749	749	3	0	Rhone

Assessor #2

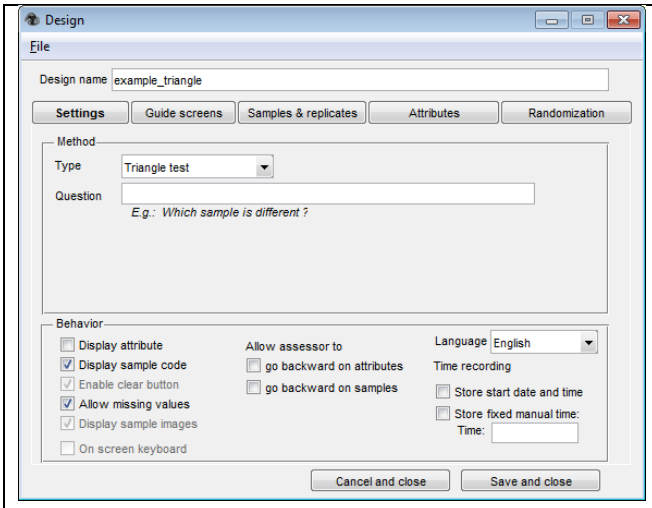
Code	Code	Sample	Replicate	Sample name
749	749	3	0	Rhone
283	283	2	0	Bordeaux
972	972	1	0	Bourgogne
517	517	4	0	Chianti

Assessor #3

Code	Code	Sample	Replicate	Sample name
972	972	1	0	Bourgogne
517	517	4	0	Chianti
749	749	3	0	Rhone
283	283	2	0	Bordeaux

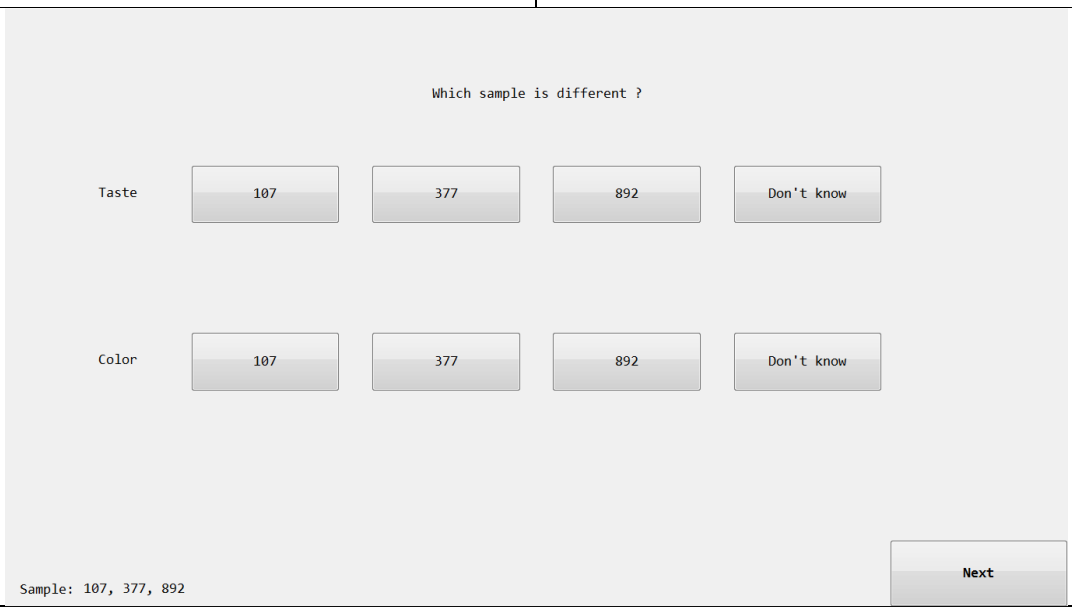
Assessor #	Attribute numbers	Attribute labels
Assessor none	(1, 2, 3, 4, 5, 6), (7, 8, 9)	(Grapefruit, Lemon, Blackberry, Raspberry, Strawberry, Black currant (cassis)), (Tea, Smokey, Coffee)
Assessor 1	(8, 9, 7), (3, 4, 5, 2, 1, 6)	(Smokey, Coffee, Tea), (Blackberry, Raspberry, Strawberry, Lemon, Grapefruit, Black currant (cassis))
Assessor 2	(5, 6, 1, 4, 3, 2), (7, 8, 9)	(Strawberry, Black currant (cassis), Grapefruit, Raspberry, Blackberry, Lemon), (Tea, Smokey, Coffee)
Assessor 3	(9, 7, 8), (2, 3, 4, 1, 6, 5)	(Coffee, Tea, Smokey), (Lemon, Blackberry, Raspberry, Grapefruit, Black currant (cassis), Strawberry)

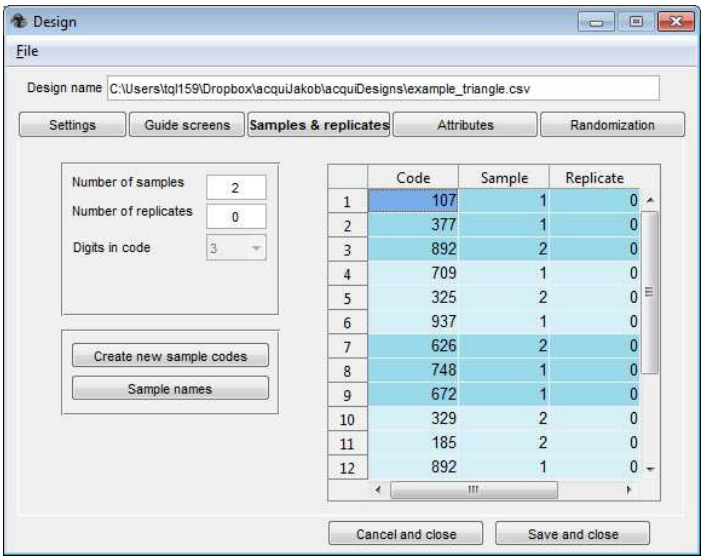
Triangle test	
	By selecting the triangle test type, the *Settings* tab change its content or dim some of the options not relevant for this method. All you need to do is to write the question presented to the

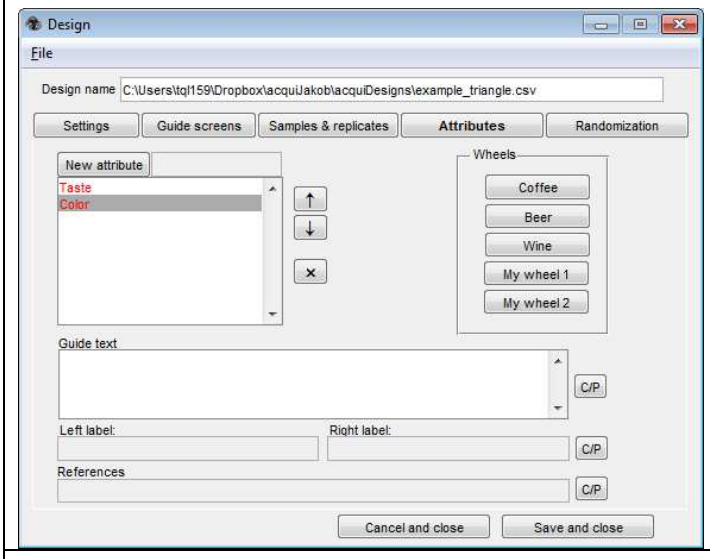


assessor.
For each attribute the question will be accompanied with four buttons with sample codes printed on them and an attribute label to the left of the buttons.

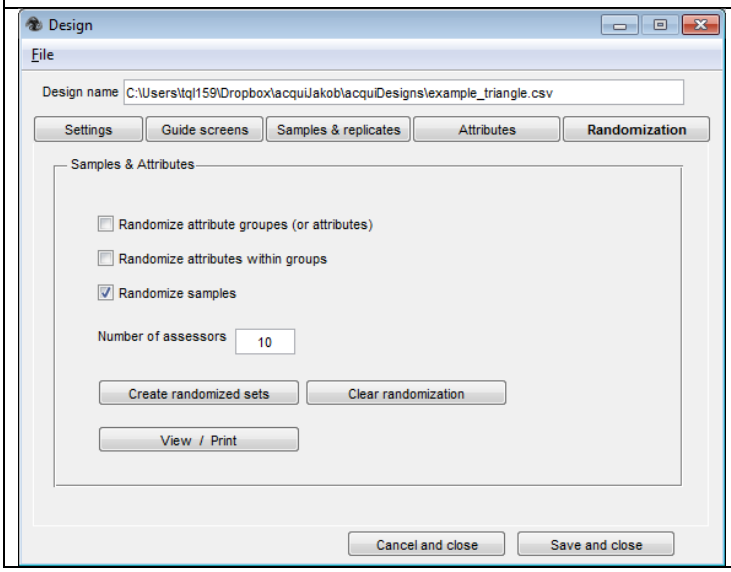
The next pages are the basis that produce a test like that shown below.







Normally triangle test are performed on two samples only.



CATA	
	In the settings tab there is a button to browse for a file. The file is backbone of the old version of a CATA design. The new version work similar to the scale and comparison designs. Attributes (or descriptors) is defined in the Attributes tab. Defining groups will cause descriptors in a group to be displayed on the same screen, just like with the linear analog scale.