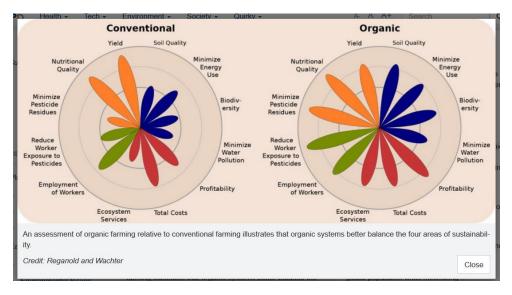
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Q1.



Q2.

Size.

Selective:

By viewing the size of the oval shaped signs it is possible to make a distinction between larger and smaller signs. Although size is not used to make a difference in a way of different categories. Colour is used as the main selective tool, together with text to make a selection inside the different categories, but that is not the main goal of the chart.

Associative;

Size is not used as a way of grouping the signs of a particular group. It is used as a way to quantify the different aspects of farming.

Quantitative;

It is hard to quantify the different sized ovals. Quantification could be achieved by making a bar chart, but the goal of the authors must have been to visualize the relative differences rather than the absolute differences.

Order;

The change in size of the signs makes the information interpretable. Together with the use of the grey lines in the background the order is clearly visible. This creates an order which makes it possible to relatively compare the different aspects of farming.

Length;

The designer has used an oval shaped way of quantifying the relative contribution of the different aspects of farming by making difference in the size of the oval. Although an oval shape is not the best way to visualize a quantification, using an oval is a more suitable round shape than for example a bubble. This is because oval shapes look more like a line, in which length has a more profound role.

In addition I think using an oval makes the general visualization look like a natural structure, which suits the subject of farming. Together with the use of the grey lines in the 'big' circle makes the relative differences in size comparable. This makes the infinite use of length by sizing the ovals still possible.

Orientation.

Selective;

Orientation is not directly used as a selective tool. Orientation does help in making a distinction between the subcategories in the different aspects in farming. The distinction between categories is mainly done by colour, but orientation helps by giving aspects inside the categories a neighbouring orientation. For the single aspects of farming the orientation does help to distinct between the different aspects.

Associative;

The use of orientation to visualize associations between the aspects is kind of the same story as the selective one, discussed directly above. Associations are made by making a general vector per subcategory, but mostly the association is made by using colour.

Quantitative;

No quantification done by orientation. Different orientations are only used to differ between the aspects of farming.

Order;

No order made by orientation. Length(size) is used for that function

Length;

As described by Bertin length(the different options) is recommended to be used by max. 4-6 orientations, in this visualization more orientations are used. But in this visualization the variability of orientations does not make the chart messy.

Q3.

Yes, in a sense it is also nice to look at a cool figure, designed to make your data spectacular. But data has to be shown in a way that you can still be critical. When visualization blocks the possibility to be critical a graph does not achieve its function. And that will always be more important, at least when data is shown to be compared or tell a story.

Q4.

It wants to show me the different aspects of farming and also **organize** it in subcategories.

It wants me to show the contributions of the different aspects, and to **compare** these between the different coloured categories.

It wants to show me the difference between the charts, and show me the skewedness in the **relative difference** between the categories.

It wants to **present** the different aspects which need to be taken care of in order to make it possible to achieve a sustainable food production.

The visualization fulfils all these tasks, but it does not really dive into detail. It shows the benefits of using organic farming to achieve a sustainable global food production, but it does not give the chance to be critical. For example the 'minimize water pollution in the organic chart is not directly visible. I have the feeling the natural shape by using the ovals is blocking the possibility to really be critical. It looks nice but also covers up the aspects that are less easy to achieve with organic farming. But this is really being critical, the overall benefit of organic farming is clearly visible. And I think the designers did not want the reader to focus on the single aspects.