

An Example LaTeX/PDF Lecture

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21st August, 2003

Changing Font Sizes

The **Huge** font size

The **LARGE** font size

The **Large** font size

The **large** font size

The default font size

The **small** font size

The **footnotesize** font size

The `scriptsize` font size

The `tiny` font size

Environment Method for Font Sizes

When one has a longer passage like this then it is probably better to use the environment method for font sizes. This involves using `\begin{LARGE}` and `\end{LARGE}` around this paragraph.

Using Different Colours

This slide illustrates use of different
COLOURS

Some colours project very well, while others are hopeless. The file `colourmacros.tex` has about 470 different colours such as PeachPuff and tomato3.

Hierarchical Lists

- First outer list item.
- Second outer list item.
- This list item has an inner list.
 - First inner list item.
 - Second inner list item.
- Back to the outer list!

Incorporating Mathematics

This seems to be the big advantage over of `pdflatex` over `Powerpoint`.

$$R_{\theta} = \begin{bmatrix} \cos \theta & \sin \theta \\ -\sin \theta & \cos \theta \end{bmatrix}$$

Incorporating Mathematics (cont.)

How long does it take to do this in **Powerpoint**?

$$\Phi(x) = \int_{-\infty}^x \frac{1}{\sqrt{2\pi}} e^{-t^2/2} dt$$

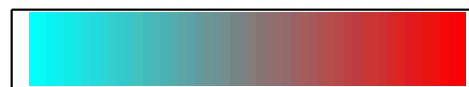
Options for Incorporating Graphics

1. Put graph on a page all by itself.
2. Have some text on the same slide as a graph.
3. Have a heading and text on the same slide as a graph.

In the current environment, 1. has no problems; while 2. and 3. lead to compromises in terms of the graph having to shrink. You also need to fiddle with the width to make sure it fits on the same slide.

Having a Graphic Alone on a Slide

On the next slide we have
the graphic **all by itself.**

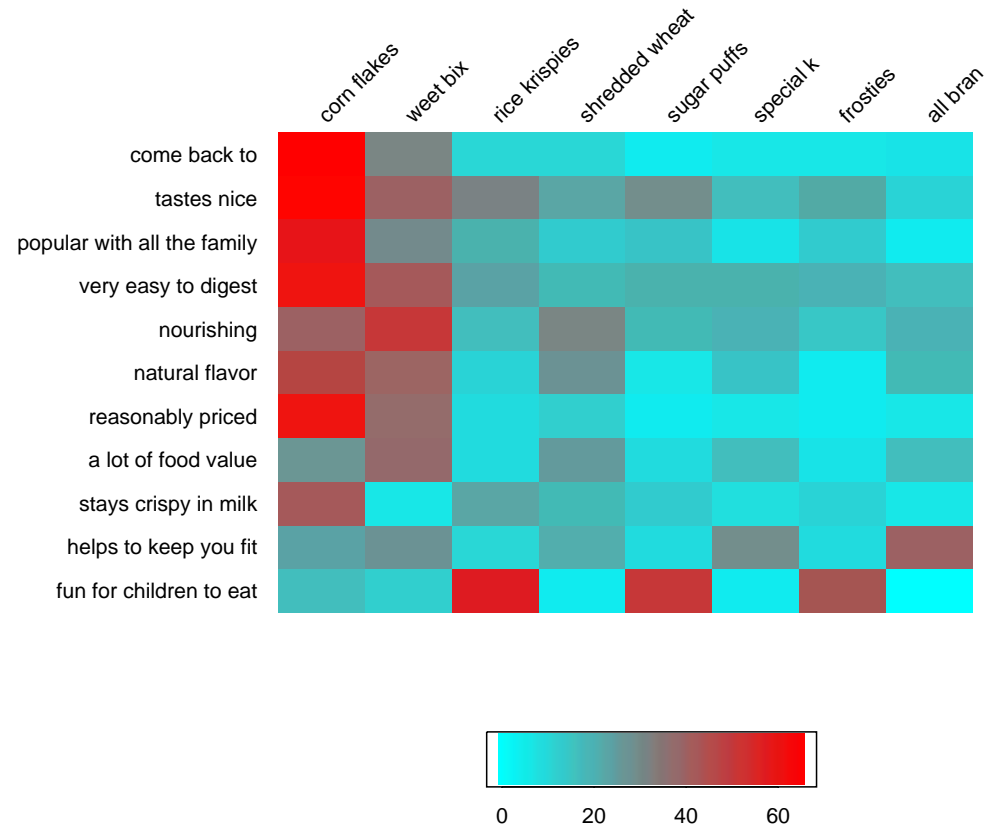


0 20 40 60

Having a Graphic with Text

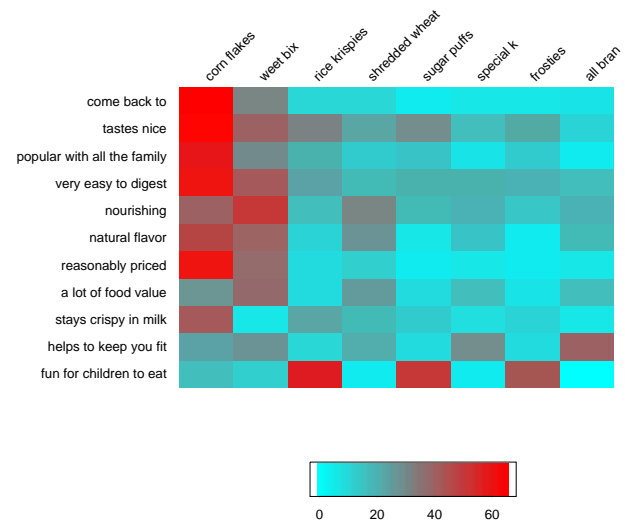
The next slide has the same graph with some text added, but we have had to change to **width=16cm** to fit it on the page.

Here is a quilt plot of some cereal survey data



Having a Graphic with Heading and Text

Here is a **quilt plot** of some **cereal survey data**:



How to Make Pretty Pictures in PDF Format?

I'm currently doing it in **S-PLUS 6.0** and have accumulated a fair bit of experience in this during the past few weeks (which I'm happy to share on request).

Still to be Figured Out

Two things I could do in my previous computing environment, but haven't gotten to work here yet are:

- backgrounds of arbitrary colour, including gradients
- pausing (adding bits to screen sequentially).

It seems that these require packages such as **Ppower4**. Ppower4 is on **Desk3**, but may have some glitches.