**Search Visualiser and dyslexia**
By Gordon Rugg

Background: This article describes ways in which we think that Search Visualiser could help people with dyslexia to do online searching more easily. We would welcome feedback about how well it actually performs.

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The Search Visualizer produces miniature images of documents, and shows the location of your chosen key words within each document using highlighting. You can use it for online search, and for looking at specific documents.

 We think that a lot of people with dyslexia will find the Search Visualizer easy to use, because it's based on visual patterns, rather than words, and because it's good at handling variant spellings with its synonym feature. However, there are probably issues that we've missed, and we'd like to find out what those issues are.

 Here's an example of how the Search Visualizer works. It's an online search looking for a quiet beach in Wales. However, all three of the keywords *quiet beach Wales* are likely to cause problems for people with dyslexia. Should it be *quiet* or *quite*, *beach* or *beech*, *Wales* or *whales*? With Search Visualizer, you simply tell the software to treat *quiet* and *quite* as synonyms by entering them next to each other in the search bar, separated by a comma, without spaces between the synonyms and the comma. You can treat several words as synonyms of each other if you want; you're not restricted to two.
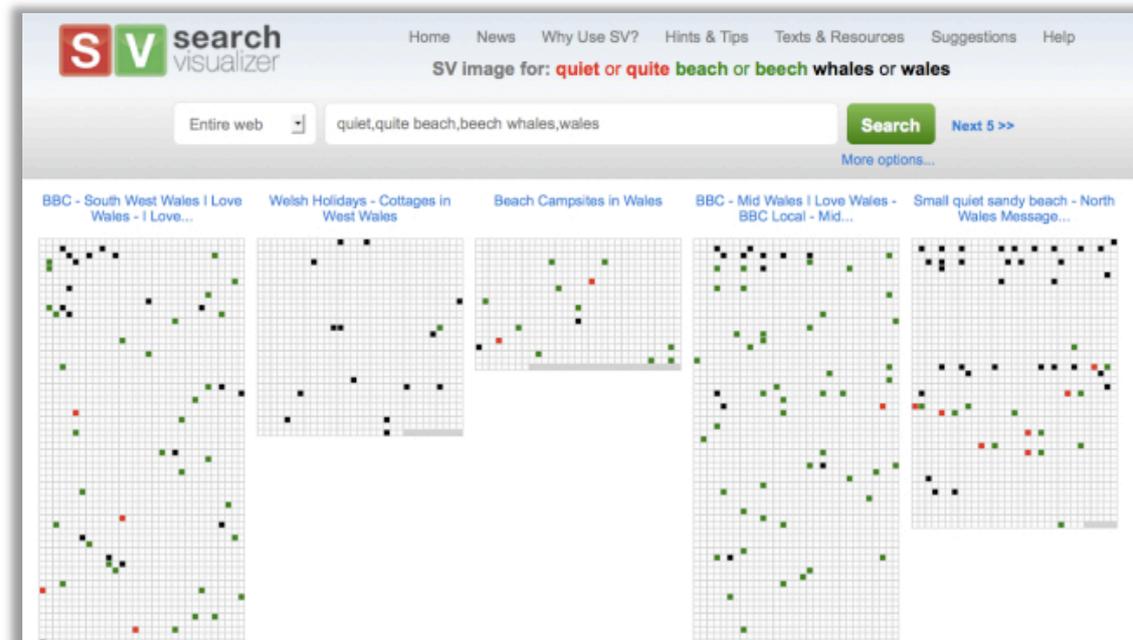

The image shows the first five records from an Internet search using Search Visualizer, with each set of keywords indicated in colour highlighter. (We've chosen the colours so they can be distinguished by people with colour blindness; you can also choose the size of the squares in the display.)

 The first record mentions all three words, but doesn't mention the words *quiet* and *beach* near each other. The second record doesn't mention *quiet* at all. The third record mentions all three words, but doesn't mention the words *quiet* and *beach* near each other. The fourth record only mentions quiet

once. The fifth record contains several mentions of the words *quiet* and *beach* near each other, so it's likely to be relevant.

The screenshot above is a bit cramped, because we've had to shrink it to fit into the blog format. Here's a more detailed image of the fifth record, so you can see the distribution of the keywords more clearly. The first half of the record is mainly about Wales, and it's only in the second half that there are mentions of quiet and beaches.
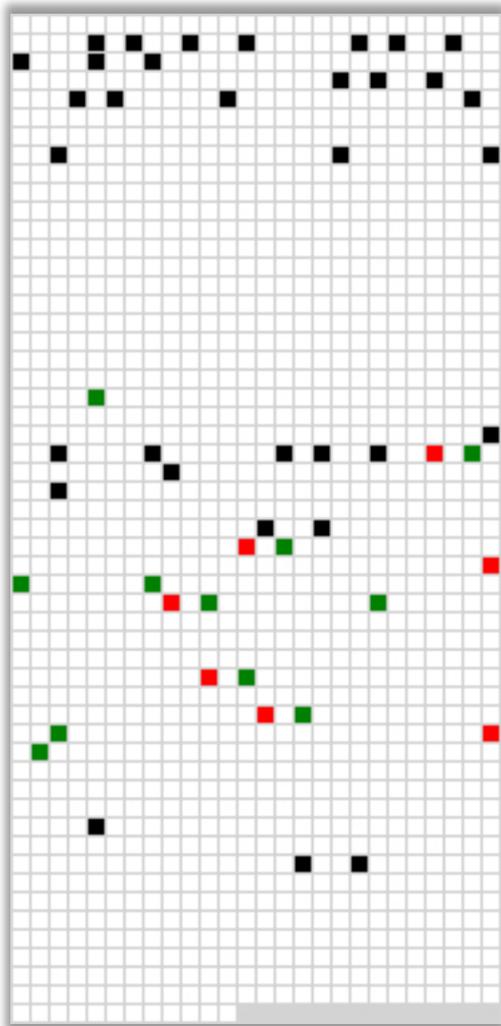
If you want to examine a record in more detail, you can click on the image of the record to bring up an interactive image. You can then mouse over the keywords, and see the surrounding text. This feature is particularly useful when you want to check something within a long document, since you can go straight to the bit that interests you without having to open the whole document. Here's an example.

The record is quite long; there's a green square near the end, followed almost immediately by a red square, so this part of the record looks potentially relevant. If we hover over the green square, then we see a text box which contains the text surrounding that square.

The text box shows that the text surrounding the green keyword at the bottom right of the zoom box is "… Sker Beach – a quiet and normally deserted beach…"

There's more about the Search Visualizer in the other articles on this blog, and on the Search Visualizer site itself:

www.searchvisualiser.com

We think that the Search Visualizer should be useful to people with dyslexia, because it works with patterns rather than words, and because it handles variant spellings well.

However, we also suspect that some people with dyslexia will find the patterns just as confusing as text.

We'd like to know what the answers are. What are the strengths and limitations of the Search Visualizer for people with dyslexia, or with other issues relating to reading?

Any thoughts or experiences would be welcome.