

# KWord based around templates and style sheets, with flexible database links

by Tom Chance

## 1. Introduction

My main use cases for KWord, which this design proposal was based around, are:

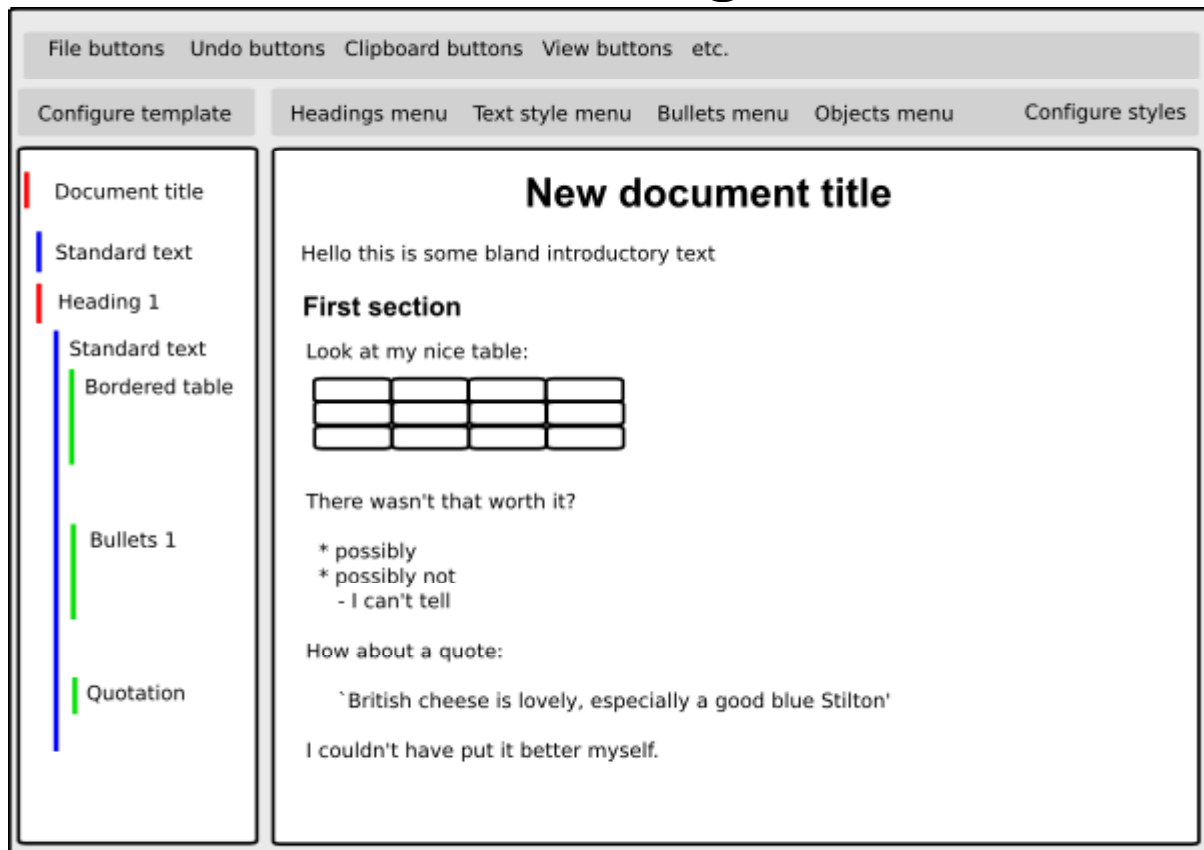
1. Writing academic philosophy papers, which requires only section headings, emphasised text, quotations, a cover sheet and (the complicated bit) citations. I use Kile with pdf2latex at the moment because the citations are a huge amount of effort to do manually in KWord, and with KWord I still feel like I'm having to muck around with style when I want to just get on and type in content.
2. Writing invoices. I have a stock document I open up with a title, table for costs, areas for addresses and so on. I've never used a template because it's never crossed my mind to. I get annoyed by having to constantly battle with style when writing, adding table rows, etc.
3. Writing formal letters, which are fine but I still (stupidly on my part probably) haven't created a template with frames for addresses, paragraph styles to space it nicely, etc.
4. Editing my CV, which again becomes a matter of fighting style whilst putting in content

My proposal is for a radical separation of style and content, such that KWord effectively forbids the user from making any style changes except through style sheets.

For users who like to knock up quick, one-off documents this will probably be cumbersome and annoying, but they can just go and use Abiword or OpenOffice.org :-). KOffice could be brave and make some really distinctive applications, just as Krita is focusing on natural media painting so KWord could focus on writing. Leave quick-n-easy word processing to Abiword, leave complicated office tools that don't fit with my proposal to OpenOffice.org.

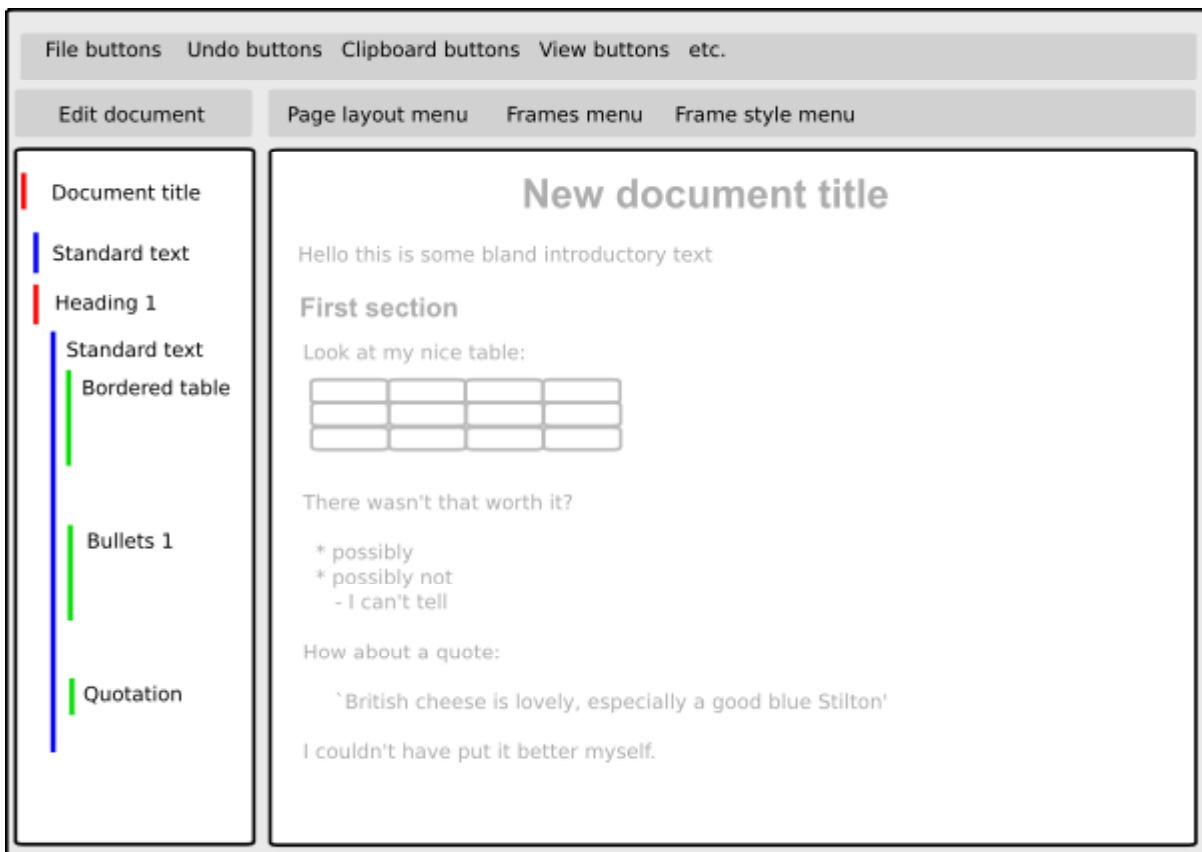
My proposal also includes a way to deal with database links in a flexible manner. It was inspired largely by my use case of citations, but I tried to make it more generic to become a useful tool for everybody. I folded it into this proposal since it links in with the content/style separation.

## 2. The document editing interface



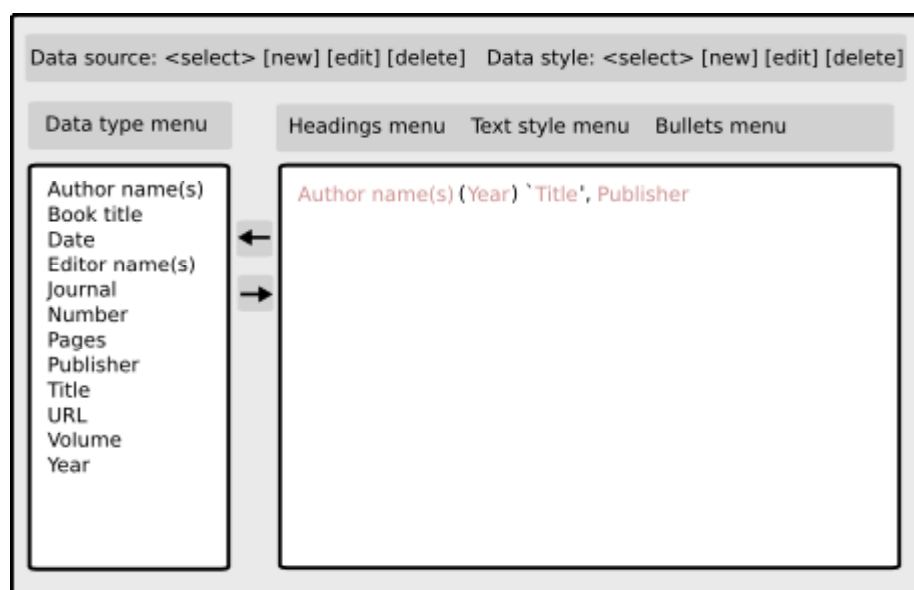
- There are no formatting toolbars (such as bold, italic, font, etc.), only style menus divided into logical groupings. You type in the title, select the text and from the headings menu select 'Document title'
- You can configure these styles with the button on the right of the toolbar. The configuration dialogue would look much the same as the dialogue that currently exists in KWord 1.5
- The left column shows the document structure, but unlike the current doc structure view this one flows parallel to the document, showing you where you've applied block styles (as opposed to specific text styles like italic, bold, etc.) It could show all styles, but I thought that showing where italic etc. is used could get a bit confusing.
- For convenience, there could be a menu in the structure column that allowed you to quickly jump to a particular point, as is enabled by the current (KWord 1.5) doc structure column.
- The idea, then, is that in this interface you just get on with inserting content. Once you've put in a table you don't have to mess about with cell widths, text styles in different cells, borders, background colours etc. You just configure the styles and, if you need more than one table style, create a second style and set that up as you want.
- For people like me who generally work on the same kinds of documents it would mean I could just get on with my work. Editing styles would probably actually be quite rare, including changing the default styles to my liking.
- To change the page layout, add frames, that sort of thing you click on the 'configure template' button (possibly edit template), which sends you to the next view...

### 3. The template editing interface



- Now the user cannot enter any text / objects.
- You can only change the page layout (portrait/landscape, margins, etc.)
- You can insert, raise/lower etc. frames
- You can style frames
- When saving the template you are presented with two options:
  - `save styles with template?'
  - `save content with template?'
  - `save database styles with template?' (see next section)
- These should be self-explanatory. They allow me to, for example, set-up a basic invoice with the correct styles and default content and then save that as a template. Or I could just save an A4 page with 1-inch margins and the styles needed for my philosophy papers and save that as a template without any default content.
- The idea here is, again, to completely separate basic layout from style and content. Once I have my layout I don't want to fiddle with it whilst editing the document, and so by separating the two 'modes' out I can get on with one or the other task without, for example, frame handles annoying me whilst typing or text getting screwed up whilst adjusting my two column frames.
- To go back to editing the document you click on the 'edit document' button.

## 4. The flexible database manager



- In the objects menu in the document editing interface you get special objects from databases, such as the KDE address book, a bibtex bibliography file or a MySQL database set-up with Kexi.
- Each data source can be configured to recognise different data types, for example:
  - In bibtex files you have Books, InCollections, Papers, etc.
  - From a MySQL database your table could have a 'type' column
- With a source and type selected, you see in the left window pane a list of the column headings available.
- You select a column heading and click on the arrow to insert it into the editing window pane.
- You can type directly into the pane to format the data, as I have done in the example above for a bibliography entry from a citation. You could also, for example, set-up a nice format with line breaks and commas for an address.
- You can style the text using the same styles available to the current document.
- At the top right I included a 'data style' menu. This is a kludgy hack for something I couldn't find a good, generic solution to.
  - With academic citations there needs to be a style for the inline text (Chance 2006, p.4) and a style for the bibliography (as shown in diagram above). The hard part is that the second style is then linked to some kind of macro, whereby you insert a bibliography and it automatically work out which citations you've made and builds the bibliography in the style specified.
  - With addresses you might want to link a style to a mail merge macro.
  - Advanced users might even want to define their own crazy macros
- So I opted for multiple styles per data source+type (e.g. inline citation, bibliography citation) with the suggestion that some source+style could be linked somehow to other functions (e.g. insert bibliography)
- From the edit interface, then, you select the object menu -> \$data\_source\_name -> \$data\_source\_style, for example 'object -> bibliography -> inline citation'. This brings up a simple dialogue listing the rows, formatted according to the style (inline citation), with an "insert at cursor" button.