

Think in Structure

a few remarks

on coding documents

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Sectioning

There can be many levels of sectioning. Where in paper documents the depth of sectioning must be limited, in interactive documents extensive sectioning can be used to ease navigation.

In a paper document, one will often use one table of contents, while in an interactive document, one can jump from table to table, from outline to detail.

It is a golden rule that the lower the level, the smaller the font size and the less standing out the section head will be. At the same time, spacing before and after the section title will diminish.

When we run out of options for assigning distinctive fonts, say at level 6, we can fall back in in-line sectioning.

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Titlepage

Every document has some typeset pages that surround the main text, like a title page and a colophon page. While structuring a document, don't bother about these. The typesetting of these components is done in the final stage of document production.

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Itemize

Itemize environments are very popular for structuring environment. The depth of an itemize environment must be limited, especially when such an environment spans many pages.

When a text contains many itemize environments, one should consider introducing a new level of sectioning.

When the items of an itemizations are short, it makes sense to pack them, that is, not separating them by white space. On the other hand, nested items can become rather unreadable when everything is packed.

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When coding a document for multiple output, like paper, screen and/or selections, one can never code too much. If you think that at some moment, something can become a hyperlink, code it as such. And, be consistent!

Whenever possible, a reference to a table should be formulated in such a way that the exact location of the table does not influence the wording of the reference. In most cases references like *see table 1.5* are adequate.

When quoting phrases or people, single and double quotes should be used consistently. What quotes are used, and where they are positioned, more depends on the language, than on personal feelings.

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Columns

Especially when using a small type, typesetting in more than one column makes sense. It can also save quite some pages. However, typesetting a text in more columns that has many levels of sectioning, large figures and wide tables, is not practical.

Reading must be fun, so use multi-columns with care. When users are supposed to print the document themselves, keep in

mind that small print can come out sub-optimal at low resolutions.

When the sole argument is in using less paper, be aware that readers often have a choice of selective printing. It can make sense to use a few more pages, and thereby making printing part of the document more comfortable, instead of a cramped style, that does not print well.

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Alignment

Given that most books, magazines, journals and newspapers have right aligned text, we may assume that this is good practice. One of the reasons for doing so, is that it improves the greyness of a page. Another reason can be found in a more efficient use of paper.

Sometimes it makes sense to use a ragged right text, for instance in itemize environments. In those situations where a whole document is typeset ragged right, one must be suspicious on the design rationale behind this choice. Don't let the lack of a decent paragraph building routine be camouflaged by often invalid arguments like readability.

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Tables

Tables need to be typeset as consistent is possible. The less rules, the better. Often horizontal rules, combined with bold header lines, can provide enough structure.

One should decide on forehand if a table may be split across pages. In those cases one should define headers in such a way that they can be repeated.

Large tables can be scaled to fit on the page. Scaling should be used with care, because using fonts at too many scales makes a document rather noisy.

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Figures

Graphics can tell more than words. But, they should be consistent, both in colors, fonts, and scaling, with the document. Unfortunately, this is not always possible, especially when they are made independently.

Where in a paper document, redundant graphics can be distracting, in screen documents, one can repeat a graphic when needed, for instance at a more comfortable scale.

In documents meant for viewing on line, one may consider including graphics at several resolutions, for low resolution viewing as well as high resolution printing.

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Formulas

Formulas can be typeset in line or display. When typeset in display, they may be numbered. Depending on the type of document, it sometimes makes sense to repeat formulas, in which case they should be put in buffers.

Typesetting formulas is a specialized job; don't underestimate the fine points of typesetting them.

Scientific units and chemical formulas should be coded in such a way that consistency is guaranteed. The same applies to legends to formulas.

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Blocks

In reference manuals, educational materials, and other large documents, it can make sense to present the content at several locations. For this purpose, the relevant parts of the source text should be marked as such.

Related to this, is the fact that we sometimes want to key in data at a location that suits best, but typeset it somewhere else. Think of questions and answers. Think in terms of reuse of information!

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Registers

Registers and tables of contents can come in many forms. A register can consist of keywords, but also of author names with titles of articles as subentry, or events and dates.

In an interactive document, a linked list of index entries makes much sense. That way users can follow a chain of keywords. In many cases, index entries at the (sub)section level make more sense than those referring to a particular sentence.

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When a document is to be printed by the user, one should realize that on a low resolution ink jet printer, backgrounds take time and can come out rather ugly.

When not properly mapped onto gray scales, colored text can become unreadable and graphics be rendered unreadable.

Because in most viewing applications one can select the range of pages to be printed, title pages can be pretty colorful and graphic, because users can choose not to print them.

In documents meant for reading on the screen, color can not only provide and enhance structure, but also compensate for the lack of a high quality medium.

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