blog.sty

—

Generating HTML Quickly with TEX*

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Abstract

blog.sty provides TEX macros for generating web pages, based on processing text files using the fifinddo package. Some LATEX commands are redefined to access their HTML equivalents, other new macro names "quote" the names of HTML elements. The package has evolved in several little steps each aiming at getting pretty-looking "hypertext" **notes** with little effort, where "little effort" also has meant avoiding studying documentation of similar packages already existing. [TODO: list them!] The package *"misuses"* TEX's macro language for generating HTML code and entirely *ignores* TEX's typesetting capabilities.—lnavicol.sty adds a more **professional** look (towards CMS?), and blogdot.sty uses blog.sty for HTML **beamer** presentations.

Contents

*This document describes version v0.62 of blog.sty as of 2011/10/22.

†`http://contact-ednotes.sty.de.vu`

1 Installing and Usage

The file blog.sty is provided ready, **installation** only requires putting it somewhere where TEX finds it (which may need updating the filename data base).[1]

User commands are described near their implementation below.

However, we must present an **outline** of the procedure for generating HTML files:

At least one **driver** file and one **source** file are needed.

The **driver** file's name is stored in `\jobname`. It loads blog.sty by

```
\RequirePackage{blog}
```

and uses file handling commands from blog.sty and fifinddo (cf. `mdoccheat.pdf` from the nicetext bundle). It chooses **source** files and the name(s) for the resulting HTML file(s). It may also need to load local settings, such as for the language (`lang-de.fdf`, `lang-en.fdf`), and settings for converting the editor's text encoding into the encoding that the head of the resulting HTML file advertises (`atari.fdf` in the nicetext bundle).

The driver file could be run a terminal dialogue in order to choose source and target files and settings. So far, I rather have programmed a dialogue just for converting UTF-8 into an encoding that my Atari editor xEDIT can deal with. I do not present this now because it was conceptually mistaken, I must set up this conversion from scratch some time.

The **source** file(s) should contain user commands defined below to generate the necessary `<head>` section and the `<body>` tags.

[1] `http://www.tex.ac.uk/cgi-bin/texfaq2html?label=inst-wlcf`

2 Examples

2.1 A Very Plain Style

My "TEX-generated pages"[2] use a **driver** file `makehtml.tex`. To choose a page to generate, I "uncomment"ed just one of several lines that set the "current conversion job" from a list (for some time). I choose the example of a simple "site map:" `texmap.htm` is generated from **source** file `texmap.tex`.—More recently however, I have started to read the job name and perhaps extra settings from a file `jobname.tex` that is created by a Bash script.

In order to make it easier for the reader to see what is essential, I have moved many `.cfg`-like extra definitions into a file `texblog.fdf`. Some of these definitions may later move into `blog.sty`. You should find `makehtml.tex`, `texmap.tex`, and `texblog.fdf` in a directory `demo/texblog` (or `texblog.fdf` may be together with the `.sty` files), perhaps you can use them as templates.

2.1.1 Driver File `makehtml.tex`

```
\def \GenDate {2011/10/23}
\ProvidesFile{makehtml.tex}[\GenDate\space HTML driver]
\RequirePackage{blog,texlinks}
\input{atari.fdf}\input{lang-en.fdf}
\input{texblog.fdf}                        %% 2011/09/24
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
\input{jobname}                            %% write with "echo"
% \def \htmljob
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% {texmap}
% {heyctan}                              %%% \def\pkg{\privpkgnamefmt}
% {makeshow}
% {texhax}
% {aaoe1550}
% {jobs}                                 %%% \BlogAutoPars
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% {beobacht} \input{lang-de.fdf}
% {gtd}      \input{lang-de.fdf}
% {MV45}      \input{mv45.fdf}
% {STEUER}   \input{lang-de.fdf}
% {GALLEY}   \input{lang-de.fdf}
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
\ResultFile{\htmljob\htmakeext}
\BlogCopyFile[\TextCodes
               \MakeActiveDef\"{\catchdq}%
             ]{\htmljob.tex}
\CloseResultFile
\stop
```

[2] `www.webdesign-bu.de/uwe_lueck/texmap.htm`

2.1.2 Source File texmap.tex

```
\ProvidesFile{texmap.tex}[2011/09/29 TeX-generated: overview]
    %% <- for blog/myfilist.sty 2011/02/22
\comment{ 2011/01/25 \string\endash\ -> \string\pardash\ }
\comment{ 2010/12/05 \string\emdash\ -> \string\endash\  }
\head \charset{ISO-8859-1} %%% {utf-8}
  \texrobots
  \texstylesheet
  \title{TeX-generated pages - U. L.}
\body \textopofpage
\heading1{Uwe Lück's \TeX-generated/related pages}
% \emdash\,I'm playing with a different style of pages here.
%   \hrule\\  %%%  \endgraf
The present page leads you to:

\begin{enumerate} %% `\href' 2011/08/18:
  \item \href{index.html}{\file{index}}\pardash my English main page
  \item \href{schreibt.html}{\file{schreibt}}\pardash my German main page
 \hrule
  \item \Fileref{aaoe1550}\pardash UMTS stick with Linux netbook
  \item \Fileref{heyctan}\pardash CTAN discoveries
  \item \Fileref{jobs}\pardash coaching             %% explained 2010/09/24
  \item \Fileref{makeshow}\pardash\TeX\ almost WYSIWYG \dots
  \item \Fileref{texhax}\pardash studies on texhax postings
 \hrule
%   \item \Fileref{beobacht}~\endash\ \dedqtd{Web-Tagebuch}
%% <- rm. 2011/09/29
  \item \Fileref{gtd}~\endash\ \dedqtd{Getting Things Done}
  \item \Fileref{MV45}~\endash\ \HTML-Prsentation von
        \ctanpkgref{nicetext} und \CtanPkgRef{morehype}{blog.sty}
  \item \Fileref{oeffnotz}~\endash\ \dedqtd{öffentliche Notizen} %% 2011/08/16b
\end{enumerate}

 \hrule
\enlastrev
\entotopofpage
\fivebreaks \fivebreaks
\finish
```

2.2 A Style with a Navigation Column

A style of web pages looking more professional than texmap.htm (while perhaps becoming outdated) has a small navigation column on the left, side by side with a column for the main content. Both columns are spanned by a header section above and a footer section below. The package lnavicol.sty provides commands

\PAGEHEAD, \PAGENAVI, \PAGEMAIN, \PAGEFOOT, \PAGEEND (and some more) for structuring the source so that the code following \PAGEHEAD generates the header, the code following \PAGENAVI forms the content of the navigation column, etc. Its code is presented in Sec. 4. For real professionality, somebody must add some fine CSS, and the macros mentioned may need to be redefined to use the @class attribute. Also, I am not sure about the table macros in blog.sty, so much may change later.

With things like these, can blog.sty become a part of a "content management system" for TEX addicts? This idea rather is based on the *German* Wikipedia article.

As an example, I present parts of the source for my "home page"[3]. As the footer is the same on all pages of this style, it is added in the driver file makehtml.tex. schreibt.tex is the source file for generating schreibt.html. You should find *this* makehtml.tex, a cut down version of schreibt.tex, and writings.fdf with my extra macros for these pages in a directory demo/writings, hopefully useful as templates.

2.2.1 Driver File makehtml.tex

```
\def \GenDate {2011/10/05}
\ProvidesFile{makehtml.tex}
             [\GenDate\space TeX engine for "writings"]
\RequirePackage{blog,texlinks,lnavicol}     %% 2011/09/02
\input{atari.fdf} \input{lang-en.fdf}
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
\input{jobname}                             %% 2011/09/24
% \def \htmljob
% {_sitemap}
% {index}                          \BlogAutoPars
% {schreibt}  \input{lang-de.fdf} \BlogAutoPars
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% {about}                          \BlogAutoPars
% {contact}                                        % \tighttrue
% {kontakt}   \input{lang-de.fdf}                  % \tighttrue
% {tutor}     \input{lang-de.fdf} \BlogAutoPars    \deeptrue
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% {writings}                       \BlogAutoPars   \deeptrue
% {repres}                         \BlogAutoPars   \deeptrue
% {critedl}                        \BlogAutoPars   \deeptrue
% {ednworks}                       \BlogAutoPars
% {public}                         \BlogAutoPars   \deeptrue
% {texproj}                        \BlogAutoPars   % \deeptrue
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
\input{writings.fdf}
```

[3] www.webdesign-bu.de/uwe_lueck/schreibt.html

```
\ResultFile{\htmljob\htmakeext}
\WriteResult\writdoctype                    %% TODO
\BlogCopyFile[\TextCodes
               \MakeActiveDef\"{\catchdq}%   %% TODO attributes!?
             ]{\htmljob.tex}
\WriteResult{\PAGEFOOT}
\WriteResult{\indentii\rainermaster}
\WriteResult{\indentii\\}
\WriteResult{\indentii\ueberseeport}
\WriteResult{\PAGEEND}
\ifdeep \WriteResult{\indenti\vspace{280}} \fi
\WriteResult{\finish}
\CloseResultFile
\stop
```

2.2.2 Source File schreibt.tex

```
\ProvidesFile{schreibt.tex}[2011/08/19 f. schreibt.html]
\head \charset{ISO-8859-1}
  \writrobots
  \writstylesheets
\title{\Uwe\ schreibt} \body \writtopofpage
\PAGEHEAD
  \headuseskiptitle{%
    \timecontimgref{writings}{0}{Zeit-Logo}{Russells Zeit}%
  }{10}{\Uwe\ \dqtd{schreibt}}
\PAGENAVI
  \fileitem{writings}{Intervallordnungen (Mathematik~etc.)}
  \fileitem{public}{Publikationen}
 \hrule
  \fileitem{critedltx}{Softwarepakete f\"ur kritische Editionen}
  \fileitem{texproj}{TeX-Projekte} %%% Makro-Projekte}
 \hrule
  \fileitem{tutor}{Mathe-Tutor}
  \indentii\item\href{texmap.htm}{Notizen}
 \hrule
  \deFIabout \deFIkontakt
\PAGEMAIN
\strong{Wissenschaft:}\enspace Diese Seiten entstanden zuerst
zur Präsentation zweier ETC.

\rightpar{\textit{Worms-Pfeddersheim, den 19.~August 2011,\\\Uwe}}
% \rightpar{\textit{München, den 31.~Juli 2011,\\\Uwe}}
  %% <- TODO VERSION
```

3 The File `blog.sty`

3.1 Package File Header (Legalize)

```
1  \NeedsTeXFormat{LaTeX2e}[1994/12/01] %% \newcommand* etc.
2  \ProvidesPackage{blog}[2011/10/22 v0.62 simple fast HTML (UL)]
3  %% copyright (C) 2010 2011 Uwe Lueck,
4  %% http://www.contact-ednotes.sty.de.vu
5  %% -- author-maintained in the sense of LPPL below.
6  %%
7  %% This file can be redistributed and/or modified under
8  %% the terms of the LaTeX Project Public License; either
9  %% version 1.3c of the License, or any later version.
10 %% The latest version of this license is in
11 %%     http://www.latex-project.org/lppl.txt
12 %% We did our best to help you, but there is NO WARRANTY.
13 %%
14 %% Please report bugs, problems, and suggestions via
15 %%
16 %%   http://www.contact-ednotes.sty.de.vu
17 %%
```

3.2 Processing

We are building on the fifinddo package:

```
18 \RequirePackage{fifinddo}
```

`\CLBrk` is a *code line break* (also saving subsequent comment mark):

```
19 \newcommand*{\CLBrk}{^^J}
```

`\htmakeext` is the extension of the generated file. Typically it should be `.html`, as set here, but my Atari emulator needs `.htm` (see `texblog.fdf`):

```
20 \newcommand*{\htmakeext}{.html}
```

`\BlogCopyFile[`⟨*changes*⟩`]{`⟨*src-file*⟩`}` "copies" the TEX source file ⟨*src-file*⟩ into the file specified by `\ResultFile`. As in TEX an empty line starts a new paragraph, we "interpret" an empty source line as HTML tag `<p>` for starting a new paragraph. Empty source lines following some first empty source line immediately are ignored ("compression" of empty lines).—However, I am not entirely sure that this won't have unwanted effects, so it must be required explicitly by `\BlogAutoPars`, or by calling the package with option `[autopars]`. In the latter case, it can be turned off by `\noBlogAutoPars`

```
21 \newif\ifBlogAutoPars
22 \newcommand*{\BlogAutoPars}{\BlogAutoParstrue}
23 \newcommand*{\noBlogAutoPars}{\BlogAutoParsfalse}
24 \DeclareOption{autopars}{\BlogAutoPars}
25 \ProcessOptions
```

```
\MakeOther\< \MakeOther\>               %% TODO ...
\newcommand*{\BlogCopyFile}[2][]{%
%     \typeout{^^J\screenqtd{blog.sty} generating   %% 2011/10/05
%                 \screenqtd{\htmljob\htmakeext}}%
```

← 2011/10/22: such a message should be in driver file when it is clear how many source files the target file has.

```
    \ProcessFileWith[\BlogCodes
                     \let\ProvidesFile\BlogProvidesFile %% 2011/02/24
                     \let\protect\@empty                %% 2011/03/24
                     #1]{#2}{%
        \IfFDinputEmpty
            {\IfFDpreviousInputEmpty
                \relax
                {\WriteResult{\ifBlogAutoPars<p>\fi}}}%
            \CopyLine
    }%
}
```

For a while, line endings swallowed inter-word spaces, until I found the setting of `\endlinechar` (fifinddo's default is `-1`) in `\BlogCodes`:

```
\newcommand*{\BlogCodes}{%                              %% 2010/09/07
    \endlinechar`\ \catcode`\~\active \BasicNormalCatCodes}
```

The tilde is active as in Plain TeX too, it is so natural to use it for abbreviating HTML's ` `!

`\ProvidesFile{`⟨*file-name*⟩`.tex}[`⟨*file-info*⟩`]` is supported for use with the myfilist package to get a list of source file infos. In generating the HTML file, the file infos are transformed into an HTML comment. Actually it is `\BlogProvidesFile` (for the time being, 2011/02/22):

```
\@ifdefinable\BlogProvidesFile{%
    \def\BlogProvidesFile#1[#2]{%
        \comment{ generated from\CLBrk\CLBrk
                  \ \ \ \ \ \ \ \ \ #1, #2,\CLBrk\CLBrk
                  \ \ \ \ \ with blog.sty,
                  \GenDate\ }}}                 %% TODO predefine?
```

(TODO: customizable style.)—Due to the limitations of the approach reading the source file line by line, the "optional argument" `[`⟨*file-info*⟩`]` of `\ProvidesFile` must appear in the same line as the closing brace of its mandatory argument. The feature may require inserting

```
\let\ProvidesFile\BlogProvidesFile
```

somewhere, e.g., in `\BlogCopyFile`.

3.3 General HTML Matters

The following stuff is required for any web page (or hardly evitable).

3.3.1 General Tagging

`\TagSurr{`⟨*el-name*⟩`}{`⟨*attr*⟩`}{`⟨*content*⟩`}`

(I hoped this way code would be more readable than with `\TagSurround` ...) and

`\SimpleTagSurr{`⟨*el-name*⟩`}{`⟨*content*⟩`}`

are used to avoid repeating element names ⟨*el-name*⟩ in definitions of TEX macros that refer to "entire" elements—as opposed to elements whose content often spans lines (as readable HTML code). We will handle the latter kind of elements using LATEX's idea of "environments." `\TagSurr` also inserts specifications of element **attributes**, [TODO: wiki.sty syntax would be so nice here] while `\SimpleTagSurr` is for elements used without specifying attributes. `\STS` is an abbreviation for `\SimpleTagSurr` that is useful as the `\SimpleTagSurr` function occurs so frequently:

```
\newcommand*{\SimpleTagSurr}[2]{<#1>#2</#1>}
\newcommand*{\STS}{} \let\STS\SimpleTagSurr %% 2010/05/23
\newcommand*{\TagSurr}[3]{<#1 #2>#3</#1>}
```

3.3.2 Attributes

Inspired by the common way to use `@` for referring to element attributes—i.e., `@`⟨*attr*⟩ refers to attribute ⟨*attr*⟩—in HTML/XML documentation, we often use

`\@`⟨*attr*⟩`{`⟨*value*⟩`}` to "abbreviate" ⟨*attr*⟩`="`⟨*value*⟩`"`

within the starting tag of an HTML element. This does not really make typing easier or improve readability, it rather saves TEX's memory by using a single token for referring to an attribute. This "abbreviation" is declared by `\declareHTMLattrib{`⟨*attr*⟩`}`, even with a check whether `\@`⟨*attr*⟩ has been defined before:

```
\newcommand*{\declareHTMLattrib}[1]{%
  \def\reserved@a{@#1}%
  \@ifundefined{@#1}%
               {\@namedef{@#1}##1{#1="##1"}}%
               \@notdefinable}
```

So after `\declareHTMLattrib{`⟨*attr*⟩`}`, `\@`⟨*attr*⟩ is a TEX macro expecting one parameter for the specification.

A few frequent attributes are declared this way here. `@class`, `@id`, `@style`, `@title`, `@lang`, and `@dir` are the ones named on *Wikipedia*:

```
\let\@class\relax     %% for tab/arr in latex.ltx
\declareHTMLattrib{class}
\declareHTMLattrib{id}
\declareHTMLattrib{style}
\let\@title\relax     %% for \title in latex.ltx
\declareHTMLattrib{title}                       %% 2011/04/26
\declareHTMLattrib{lang}
\declareHTMLattrib{dir}
```

`@type` is quite frequent too:

```
\declareHTMLattrib{type}
```

`@href` is most important for that "hyper-text:"

```
\declareHTMLattrib{href}
```

... and `@name` (among other uses) is needed for `@name` for hyper-text anchors:

```
\declareHTMLattrib{name}                        %% 2010/11/06
```

`@bgcolor` is used in tables as well as for the appearance of the entire page:

```
\declareHTMLattrib{bgcolor}
```

Of course, conflicts may occur, as the form `\@`⟨*ASCII-chars*⟩ of macro names is used for internal (La)TEX macros. Indeed, `\@width` that we want to have for the `@width` attribute already "abbreviates" TEX's "keyword" (TEXbook p. 61) `width` in LATEX (for specifying the width of a `\hrule` or `\vrule` from TEX; again just saving TEX tokens rather than for readibility).

```
\PackageWarning{blog}{Redefining \protect\@width}
\let\@width\relax
\declareHTMLattrib{width}
```

Same with `@height`:

```
\PackageWarning{blog}{Redefining \protect\@height}
\let\@height\relax
\declareHTMLattrib{height}              %% 2010/07/24
```

We can enumerate the specifications allowed for `@align`:

```
\newcommand*{\@align@c}{\@align{center}}
\newcommand*{\@align@l}{\@align{left}}
\newcommand*{\@align@r}{\@align{right}}
\newcommand*{\@align}[1]{align="#1"}
```

`@valign@t`:

```
\newcommand*{\@valign@t}{v\@align{top}} %% 2011/04/24
```

Some other uses of `\declareHTMLattrib` essential for *tables:*

```
\declareHTMLattrib{border}              %% 2011/04/24
\declareHTMLattrib{cellpadding}         %% 2010/07/18
\declareHTMLattrib{cellspacing}         %% 2010/07/18
\declareHTMLattrib{colspan}             %% 2010/07/17
\declareHTMLattrib{frame}               %% 2010/07/24
```

Another problem with this namespace idea is that *either* this reference to attributes cannot be used in "author" source files for generating HTML—*or* `@` cannot be used for "private" (internal) macros. Cf. `\ContentAtt` for `<meta>` tags ... well, not so bad, as the main purpose of this namespace is saving tokens *in macros.*

3.3.3 HTML's Special Symbols

`#` is needed for numerical specifications in HTML, especially colors and Unicode symbols, while it plays a different (essential) role in our definitions of TEX macros here. We redefine LATEX's `\#` for a kind of "quoting" `#` in macro definitions in order to refer to their HTML meaning.—I **wonder** what I had in mind with the `&` things here. I cannot find any use of `\AmpMark` in my code (including my web pages). There is no real problem with calling special HTML symbols, `&` is simply made `other` already here for macros calling those symbols (below), and in processing source files, it is as well `other` by default. The symbols section, however, redefines `\&` for calling HTML's ampersand symbol.

```
{\catcode`\&=12   \catcode`\#=12
 \gdef\AmpMark{&} \gdef\#{#}}
```

... `\CompWordMark` etc.?

3.3.4 Head

`\head` produces the first two tags that an HTML file must start:

```
\newcommand*{\head}{<html><head>}   %% ^^J rm 2010/10/10
```

`\MetaTag{`⟨*inside*⟩`}` and `\ContentAtt{`⟨*value*⟩`}` are internal shortcuts:

```
\newcommand*{\MetaTag}[1]{\space\space<meta #1>}
\newcommand*{\ContentAtt}[1]{content="#1"}
```

`\charset{`⟨*code-page*⟩`}`

```
\newcommand*{\charset}[1]{%
  \MetaTag{http-equiv="Content-Type" \ContentAtt{text/html; #1}}}
```

`\description{`⟨*text*⟩`}` for web searches (I think):

```
% \newcommand*{\description}[1]{%
%   \MetaTag{\@name{description} \ContentAtt{#1}}}
```

. . . an outright **mistake!** The definition is overridden to get the HTML equivalent to LaTeX's `description` environment. `\newcommand` did not warn here because we don't load any LaTeX class for text-processing macros and code generation.—And so some `\MetaDescr` should be defined—and used finally! TODO

`\robots{`⟨*instructions*⟩`}`:

```
\newcommand*{\robots}[1]{%% juergenf: index, follow, noarchive
  \MetaTag{\@name{robots} \ContentAtt{#1}}}
```

`\norobots` for privacy:

```
\newcommand*{\norobots}{\robots{noarchive,nofollow,noindex}}
```

`\stylesheet{`⟨*media*⟩`}{`⟨*css*⟩`}` uses ⟨*css*⟩`.css` for `media="`⟨*media*⟩`"`:

```
\newcommand*{\stylesheet}[2]{%
  \space\space                        %% 2010/09/10
  <link rel="stylesheet" media="#1"
        \@type{text/css}              %% \@type 2011/10/05
        \@href{#2.css}>}
```

Alternatively, style declarations may occur in the `<style>` element. It can be accessed by the `{style}` environment (cf. Sec. 3.6):

```
\newenvironment*{style}[1]
                {<style \@type{text/css} media="#1">}
                {</style>}
```

With `\title{`⟨*text*⟩`}`, ⟨*text*⟩ heads the browser window:

```
\renewcommand*{\title}[1]{\space\space<title>#1</title>}
```

3.3.5 Body

`\body` separates the `head` element from the `body` element of the page.

```
\newcommand*{\body}{</head><body>}
```

`\topofpage` generates an anchor `top-of-page`:

```
\newcommand*{\topofpage}{\hanc{top-of-page}{}}
```

`\finish` finishes the page, closing the `body` and `html` elements.

```
\newcommand*{\finish}{</body></html>}
```

3.4 Fonts

`\heading{`⟨*level*⟩`}{`⟨*text*⟩`}` prints ⟨*text*⟩ with size dependent on ⟨*level*⟩. The latter may be one out of 1, 2, 3, 4, 5, 6.

```
\newcommand*{\heading}[1]{\SimpleTagSurr{h#1}}
```

... I might use \section etc. one day, I made \heading when I could not control the sizes of the section titles properly and decided first to experiment with the level numbers.

We "re-use" some LaTeX commands for specifying font attributes, rather than (re)defining macros \i, \b, \tt, ...

\textit{⟨text⟩} just expands to ⟨text⟩

```
110 \renewcommand*{\textit}{\SimpleTagSurr i}
```

etc. for \textbf, \texttt ...:

```
111 \renewcommand*{\textbf}{\SimpleTagSurr b}
112 \renewcommand*{\texttt}{\SimpleTagSurr{tt}}          %% 2010/06/07
```

\textsf{⟨text⟩} chooses some sans-serif:

```
113 \renewcommand*{\textsf}{%
114     \TagSurr{span}{\@style{font-family:sans-serif}}}
```

\textcolor is from LaTeX's color package that we won't load for generating HTML, so it is "new" here, it is just natural to use it for colored text. <font> is deprecated, use instead:

```
115 % \newcommand*{\textcolor}[1]{\TagSurr{font}{color="#1"}}
116 \newcommand*{\textcolor}[1]{\TagSurr{span}{\@style{color:#1}}}
```

3.5 Logical Markup

\code{⟨text⟩} marks ⟨text⟩ as "code," just accessing te <code> element, while standard LaTeX does not provide a \code command:

```
117 \newcommand*{\code}{\SimpleTagSurr{code}}   %% 2010/04/27
```

\emph{⟨text⟩} is LaTeX's command again, but somewhat abused, expanding to '⟨text⟩':

```
118 \renewcommand*{\emph}  {\SimpleTagSurr{em}}
```

... Note that LaTeX's \emph feature of switching to up when \emph appears in an italic context doesn't work here ...

\strong{⟨text⟩} again just calls an HTML element. It may behave like \textbf{⟨text⟩}, or ... I don't know ...

```
119 \newcommand*{\strong}{\SimpleTagSurr{strong}}
```

\var{⟨symbol(s)⟩} accesses the <var> element:

```
120 \newcommand*{\var}{\SimpleTagSurr{var}}
```

\acronym{⟨chars⟩} ... there is \acro in the TUGboat macros, while HTML provides an <acronym> environment ...

```
121 \newcommand*{\acronym}{\SimpleTagSurr{acronym}}
```

3.6 Environments

We reduce LaTeX's `\begin` and `\end` to their most primitive core.

`\begin{`⟨*command*⟩`}` just executes the macro \⟨*command*⟩, and

`\end{`⟨*command*⟩`}` just executes the macro `\end`⟨*command*⟩.

They don't constitute a group with local settings. Indeed, the present (2010/11/07) version of blog.sty does not allow any assignments while "copying" the TeX source into the `.htm`. There even is no check for proper nesting. `\begin` and `\end` just represent HTML elements (their starting/ending tags) that typically have "long" content. (We might "intercept" `\begin` and `\end` before copying for executing some assignments in a future version.)

```
\let\begin\@nameuse
\def\end#1{\csname end#1\endcsname}
```

... moving `{english}` to `xmlprint.cfg` 2010/05/22 ...

As formerly with "fonts," we have *two* policies for **choosing macro names**: (i) using an *existing* HTML element name, (ii) using a LaTeX command name for accessing a somewhat similar HTML element having a *different* name. [2011/10/05: so what? TODO]

New 2011/10/05: With `\useHTMLelement{`⟨*ltx-env*⟩`}{`⟨*html-el*⟩`}`, you can access the `<`⟨*html-el*⟩`>` element by the ⟨*ltx-env*⟩ environment. The "starred" form is for "list" environments where I observed around 2011/10/01 that certain links (with Mozilla Firefox) need `</li>`:

```
\newcommand*{\useHTMLelement}{%
    \@ifstar{\@useHTMLelement[</li>]}{\@useHTMLelement}}
\newcommand*{\@useHTMLelement}[3][]{%
    \@namedef{#2}{<#3>}%
    \@namedef{end#2}{#1</#3>}}
```

Applications:

CARE: `{small}` is an environment here, it is not in LaTeX:

```
\useHTMLelement{small}{small}
```

`{center}`:

```
% \renewenvironment*{center}{<p align="center">}{</p>}
% \renewenvironment*{center}{<p \@align@c>}{</p>}
\useHTMLelement{center}{center}
```

The next definitions for `{enumerate}`, `{itemize}`, `{verbatim}` follow policy (ii):

```
\useHTMLelement*{enumerate}{ol}
\useHTMLelement*{itemize}  {ul}
```

With blog.sty, `{verbatim}` really doesn't work much like its original LaTeX variant. TeX macros inside still are expanded, and you must care yourself for wanted "quoting":

```
\useHTMLelement{verbatim} {pre}
```

`{quote}`:

```
\useHTMLelement{quote}{blockquote}
```

For list `\item`s, I tried to get readable HTML code using `\indenti`. This fails with nested lists. The indent could be increased for nested lists if we supported assignments with `\begin` and `\end`. 2011/10/04 including `</li>`, repairs more links in DANTE talk (missing again 2011/10/11!?):

```
\renewcommand*{\item}{%
    \indenti</li>\CLBrk                              %% 2011/10/11
    \indenti<li>}
```

LaTeX's `{description}` environment redefines the label format for the optional argument of `\item`. Again, *we* cannot do this here (we even cannot use optional arguments, at least not easily). Instead we define a different `\ditem{`⟨*term*⟩`}` having a *mandatory* argument (TODO star?).

```
\useHTMLelement{description}{dl}
\newcommand*{\ditem}[1]{\indenti<dt>\strong{#1}<dd>}
```

3.7 Links

3.7.1 Basic Link Macros

`\hanc{`⟨*name*⟩`}{`⟨*text*⟩`}` makes ⟨*text*⟩ an anchor with HTML label ⟨*name*⟩ like hyperref's `\hypertarget{`⟨*name*⟩`}{`⟨*text*⟩`}` (that we actually provide as well, towards printing from the same source):

```
\newcommand*{\hanc}[1]{\TagSurr a{\@name{#1}}}
\@ifdefinable\hypertarget{\let\hypertarget\hanc}
```

`\hancref{`⟨*name*⟩`}{`⟨*target*⟩`}{`⟨*text*⟩`}` makes ⟨*text*⟩ an anchor with HTML label ⟨*name*⟩ and at the same time a link to ⟨*target*⟩:

```
\newcommand*{\hancref}[2]{\TagSurr a{\@name{#1} \@href{#2}}}
```

`\href{`⟨*name*⟩`}{`⟨*text*⟩`}` makes ⟨*text*⟩ a link to ⟨*name*⟩ (as with hyperref):

```
\newcommand*{\href}[1]{\TagSurr a{\@href{#1}}}
```

3.7.2 Special cases of Basic Link Macros

`\autanc{`⟨*text*⟩`}` creates an anchor where ⟨*text*⟩ is the text and the internal label at the same time:

```
146 \newcommand*{\autanc}[1]{\hanc{#1}{#1}}                %% 2010/07/04
```

`\ancref{`⟨*name*⟩`}{`⟨*text*⟩`}` makes ⟨*text*⟩ a link to an anchor ⟨*name*⟩ on the same web page. This is especially useful for a "table of contents"—a list of links to sections of the page. It is just like hyperref's `\hyperlink{`⟨*name*⟩`}{`⟨*text*⟩`}`:

```
147 \newcommand*{\ancref}[1]{\href{\##1}}
148 \@ifdefinable\hyperlink{\let\hyperlink\ancref}
```

`\autref{`⟨*text*⟩`}` makes ⟨*text*⟩ a link to an anchor named ⟨*text*⟩ itself:

```
149 \newcommand*{\autref}[1]{\ancref{#1}{#1}}                %% 2010/07/04
```

3.7.3 Italic Variants

Some of the link macros get "emphasized" or "italic" variants. Originally I used "emphasized," later I decided to replace it by "italic," as I found that I had used italics for another reason than emphasizing. E.g., ⟨*text*⟩ may be 'bug,' and I am not referring to some bug, but to the Wikipedia article *Bug.* This has been inspired by some Wikipedia typography convention about referring to titles of books or movies. (The `em` → `it` replacement has not been completed yet.)

```
150 % \newcommand*{\emhref}[2]{\href{#1}{\emph{#2}}}
151 \newcommand*{\ithref}[2]{\href{#1}{\textit{#2}}}
152 \newcommand*{\itancref}[2]{\ancref{#1}{\textit{#2}}}%% 2010/05/30
153 \newcommand*{\emancref}[2]{\ancref{#1}{\emph{#2}}}
```

3.7.4 Built Macros for Links to Local Files

Originally, I wanted to refer to my web pages only, using

`\fileref{`⟨*filename-base*⟩`}`.

I have used extension `.htm` to avoid disturbing my Atari editor xEDIT or the the Atari emulator (Hatari). The extension I actually use is stored as macro `\htext` in a more local file (e.g., `.cfg`).—Later I realized that I may want to refer to local files other than web pages, and therefore I introduced a more general `\FileRef{`⟨*filename*⟩`}|`, overlooking that it was the same as `\href`.

```
154 % \newcommand*{\FileRef}[1]{\TagSurr a{\@href{#1}}}
155 \newcommand*{\htext}{.htm}                              %% 2011/10/05
156 \newcommand*{\fileref}[1]{\href{#1\htext}}
157 % \newcommand*{\emfileref}[2]{\fileref{#1}{\emph{#2}}}
158 \newcommand*{\itfileref}[2]{\fileref{#1}{\textit{#2}}}
```

`\fileancref{`⟨*file*⟩`}{`⟨*anchor*⟩`}{`⟨*text*⟩`}` links to anchor ⟨*anchor*⟩ on web page ⟨*file*⟩:

```
\newcommand*{\fileancref}[2]{%
  \TagSurr a{\@href{#1\htext\##2}}}
% \newcommand*{\emfileancref}[3]{\fileancref{#1}{#2}{\emph{#3}}}
```

← 2010/05/31 →

```
\newcommand*{\itfileancref}[3]{\fileancref{#1}{#2}{\textit{#3}}}
```

3.7.5 Built Macros for Links to Remote Files

blog.sty currently (even 2011/01/24) implements my style *not* to open a new browser window or tab for *local* files but to open a new one for *remote* files, i.e., when a file is addressed by a full URL. This may change (as with blogdot.sty, 2011/10/12, or more generally with local non-HTML files), so let us have a backbone `\hnewref{`⟨*prot*⟩`}{`⟨*host-path*[`#f`*rag*]⟩`}{`⟨*text*⟩`}` that makes ⟨*text*⟩ a link to ⟨*prot*⟩⟨*host-path*[`#f`*rag*]⟩:

```
\newcommand*{\hnewref}[2]{%
    \TagSurr a{\@href{#1#2" target="_blank}}}
```

So

`\httpref{`⟨*host-path*[*#frag*]⟩`}{`⟨*text*⟩`}`

makes ⟨*text*⟩ a link to `http://`⟨*host-path*[`#f`*rag*]⟩:

```
\newcommand*{\httpref}{\hnewref{http://}}
```

With v0.4, macros based on `\httpref` are moved to texlinks.sty:

```
\RequirePackage[blog]{texlinks}[2011/02/10]
```

Former `\urlref` appears as `\urlhttpref` there ...

```
\newcommand \urlref {}      \let\urlref\urlhttpref
```

... and `\ctanref` has changed its meaning there as of 2011/10/21. texlinks sometimes uses a "permanent alias" `\NormalHTTPref` of `\httpref`:

```
\@ifdefinable \NormalHTTPref {\let\NormalHTTPref\httpref}
```

`\httpsref` is the analogue of `\httpref` for `https://`:

```
\newcommand*{\httpsref}{\hnewref{https://}}
```

3.8 Characters/Symbols

3.8.1 Basic Preliminaries

`&` is made `other` for using it to call HTML's "character entities."

```
\@makeother\&
```

Again we have the two policies about choosing macro names and respectively two new definition commands. `\declareHTMLsymbol{`⟨*name*⟩`}` defines a macro \⟨*name*⟩ expanding to `&`⟨*name*⟩`;`. Checking for prior definedness hasn't been implemented yet. (TODO; but sometimes redefining ...)

```
171 \newcommand*{\declareHTMLsymbol}[1]{\@namedef{#1}{&#1;}}
```

`\renderHTMLsymbol{`⟨*macro*⟩`}{`⟨*name*⟩`}` *redefines* macro ⟨*macro*⟩ to expand to `&`⟨*name*⟩`;`:

```
172 \newcommand*{\renderHTMLsymbol} [2]{\renewcommand*{#1}{&#2;}}
```

Redefinitions of `\&` and `\%` (well, `\PercentChar` is fifinddo's version of LaTeX's `\@percentchar`):

```
173 \renderHTMLsymbol{\&}{amp}
174 \let\%\PercentChar
```

3.8.2 Diacritics

For the difference between "diacritic" and "accent," see Wikipedia.
`\ccedil`:

```
\declareHTMLsymbol{ccedil}
```

HTML entities `&eacute;`, `&ocirc;` etc. can be accessed by TEX's accent commands `\'`, `\^`, `\‘`, `\"`:

```
% \declareHTMLsymbol{eacute}
% \declareHTMLsymbol{ocirc}
\renewcommand*{\'}[1]{&#1acute;}
\renewcommand*{\^}[1]{&#1circ;}
\renewcommand*{\‘}[1]{&#1grave;}
\renewcommand*{\"}[1]{&#1uml;}
```

`\uml{`⟨*char*⟩`}` may have been overestimated:

```
% \newcommand*     {\uml}[1]  {&#1uml;}   %% 2010/08/24
```

3.8.3 Greek

```
\declareHTMLsymbol{Alpha}
\declareHTMLsymbol{alpha}
\declareHTMLsymbol{Beta}
\declareHTMLsymbol{beta}
\declareHTMLsymbol{Gamma}
\declareHTMLsymbol{gamma}
\declareHTMLsymbol{Delta}
\declareHTMLsymbol{delta}
\declareHTMLsymbol{Epsilon}
\declareHTMLsymbol{epsilon}
\declareHTMLsymbol{Zeta}
\declareHTMLsymbol{zeta}
\declareHTMLsymbol{Eta}
\declareHTMLsymbol{eta}
\declareHTMLsymbol{Theta}
\declareHTMLsymbol{theta}
\declareHTMLsymbol{Iota}
\declareHTMLsymbol{iota}
\declareHTMLsymbol{Kappa}
\declareHTMLsymbol{kappa}
\declareHTMLsymbol{Lambda}
\declareHTMLsymbol{lambda}
\declareHTMLsymbol{My}
\declareHTMLsymbol{my}
\declareHTMLsymbol{Ny}
\declareHTMLsymbol{ny}
\declareHTMLsymbol{Xi}
\declareHTMLsymbol{xi}
```

```
\declareHTMLsymbol{Omikron}
\declareHTMLsymbol{omikron}
\declareHTMLsymbol{Pi}
\declareHTMLsymbol{pi}
\declareHTMLsymbol{Rho}
\declareHTMLsymbol{rho}
\declareHTMLsymbol{Sigma}
\declareHTMLsymbol{sigma}
\declareHTMLsymbol{sigmaf}
\declareHTMLsymbol{Tau}
\declareHTMLsymbol{tau}
\declareHTMLsymbol{Upsilon}
\declareHTMLsymbol{upsilon}
\declareHTMLsymbol{Phi}
\declareHTMLsymbol{phi}
\declareHTMLsymbol{Chi}
\declareHTMLsymbol{chi}
\declareHTMLsymbol{Psi}
\declareHTMLsymbol{psi}
\declareHTMLsymbol{Omega}           %% render -> declare 2011/02/26
\declareHTMLsymbol{omega}
\declareHTMLsymbol{thetasym}
\declareHTMLsymbol{upsih}
\declareHTMLsymbol{piv}
```

3.8.4 Arrows

Arrows: \gets, \to, \uparrow, \downarrow ...

```
\renderHTMLsymbol {\gets}     {larr}
\renderHTMLsymbol {\to}       {rarr}
\renderHTMLsymbol {\uparrow}  {uarr}    %% 2010/09/15
\renderHTMLsymbol {\downarrow}{darr}    %% 2010/09/15
```

3.8.5 Dashes

The ligatures -- and --- for en dash and em dash don't work in our expanding mode. Now, HTML's policy for choosing names often prefers shorter names than are recommended for (La)TEX, so here I adopt a *third* police besides (i) and (ii) earlier; cf. LATEX's \textemdash and \textendash.—\newcommand does not accept macros whose names start with end, so: \endash, \emdash ...

```
\def         \endash  {&ndash;}         %% \end... illegal
\newcommand*{\emdash} {&mdash;}
```

3.8.6 Spaces

"Math" (not only!) spaces \,, \enspace, \quad, \qquad:

```
\renderHTMLsymbol{\enspace}{ensp}
```

```
\renderHTMLsymbol{\quad}   {emsp}
\renewcommand*   {\qquad}  {\quad\quad}
```

2011/07/22: ` ` allows line breaks, so we introduce `\thinsp` to access ` `, while `\thinspace` and `\,` use Unicode "Narrow No-Break Space" (`U+202F`, see *Wikipedia Space (punctuation)*; browser support?):

```
% \renderHTMLsymbol{\thinspace}{thinsp}
% \renderHTMLsymbol{\,}        {thinsp}
\declareHTMLsymbol{thinsp}
\renderHTMLsymbol{\thinspace}{\#8239}
\renderHTMLsymbol{\,}        {\#8239}
```

`\figurespace` (U+2007, cf. *Wikipedia*):

```
\newcommand*{\figurespace}{&\#8199;}
```

3.8.7 Quotes, Apostrophe, Prime

`\lq`, `\rq`

```
\renderHTMLsymbol{\lq}    {lsquo}
\renderHTMLsymbol{\rq}    {rsquo}
```

In order to use the right single quote for the HTML apostrophe, we must save other uses before. `\screentqtd{`⟨*text*⟩`}` is used for screen messages, and `\urlapostr` is the version of the right single quote for URLs of Wikipedia articles:

```
\newcommand*{\screenqtd}[1]{`#1'}
\newcommand*{\urlapostr}   {'}              %% 2010/09/10
```

Here finally is the change of `'`:

```
\MakeActiveDef\'{&rsquo;}
```

... TODO `\MakeActiveLet\'\rq`! And this might better be in `\BlogCodes`! would save `\screenqtd`! Tilde likwise!? ... TODO change `\catcode`\'`!? 2010/04/26

`\bdquo`, `\ldquo`, `\rdquo`, `\sbquo`, `\prime`, `\Prime` ...

```
\declareHTMLsymbol{bdquo}                   %% 2011/09/23
\declareHTMLsymbol{ldquo}
\declareHTMLsymbol{rdquo}
\declareHTMLsymbol{sbquo}                   %% 2010/07/01
\renewcommand*{\prime}{&prime;}
\declareHTMLsymbol{Prime}
% \newcommand*{\Prime}{&Prime;}
```

`\endqtd{`⟨*text*⟩`}` quotes in the English style using double quote marks, `\enqtd{`⟨*text*⟩`}` uses single quote marks instead, and `\dedqtd{`⟨*text*⟩`}` quotes in German style:

```
\def\endqtd#1{\ldquo#1\rdquo}       %% \newcommand: ``\end"
\newcommand*\enqtd[1]{\lq#1\rq}     %% 2010/09/08, \new... 2010/11/08
\newcommand*{\dedqtd}[1]{\bdquo#1\ldquo}
\newcommand*{\deqtd}[1]{&sbquo;#1&lsquo;}   %% corr. 2011/05/14
```

TODO \glqq from german.sty etc.

3.8.8 Math

Because < and > are used for HTML's element notation, we provide aliases \gt, \lt for mathematical $<$ and $>$:

```
\declareHTMLsymbol{gt}
\declareHTMLsymbol{lt}
```

\ge, \le, and \ne for $\geq$, $\leq$, and $\neq$ resp.:

```
\declareHTMLsymbol{ge}
\declareHTMLsymbol{le}
\declareHTMLsymbol{ne}
```

We also provide their TEX aliases \geq, \leq, \neq:

```
\let\geq\ge
\let\leq\le
\let\neq\ne
```

Angle braces \langle and \rangle:

```
\renderHTMLsymbol{\langle}{lang}
\renderHTMLsymbol{\rangle}{rang}
```

The one-argument macro \angled{⟨*angled*⟩} allows better readable code (should be in a more general package):

```
\newcommand*{\angled}[1]{\langle#1\rangle}
```

Curly braces \{ and \} ...:

```
\begingroup
    \Delimiters\[\] \gdef\{[{] \gdef\}[}]
\endgroup
```

TEX's \ast corresponds to the "lower" version of the asterisk:

```
\renderHTMLsymbol{\ast}{lowast}                  %% 2011/03/29
```

Besides TEX's \subset and \subseteq, we provide short versions \sub and \sube inspired by HTML:

```
\declareHTMLsymbol{sub}                          %% 2011/04/04
\let\subset\sub                                  %% 2011/05/08
\declareHTMLsymbol{sube}                         %% 2011/03/29
\let\subseteq\sube                               %% 2011/05/08
```

TEX and HTML agree on `\cap`, `\cup`, and `\times`:

```
\declareHTMLsymbol{cap}                    %% 2011/04/04
\declareHTMLsymbol{cup}                    %% 2011/04/04
\declareHTMLsymbol{times}                  %% 2011/04/04
```

We stick to TEX's `\emptyset`

```
\renderHTMLsymbol{\emptyset}{empty}        %% 2011/04/14
```

We need `\minus` since math mode switching is not supported by blog:

```
\declareHTMLsymbol{minus}                  %% 2011/03/31
```

We override HTML's '`&circ;`' to get TEX's `\circ` (i.e., ○; but I cannot see it on my own pages!?):

```
\renderHTMLsymbol{\circ}{\#x2218}          %% 2011/04/28
\renderHTMLsymbol{\cdot}{middot}           %% 2011/05/07
```

`\sdot` generates `&sdot,`, a variant of of `&middot;` reserved for the dot product according to the German *Wikipedia*

```
\declareHTMLsymbol{sdot}                   %% 2011/05/08
```

I provide `\degrees` for the degree symbol. LATEX already has `\deg` as an operator, therefore I do not want to use `\declareHTMLsymbol` here.

```
\newcommand*{\degrees}{&deg;}
```

3.8.9 Other

The tilde `~` is used for its wonderful purpose, by analogy to TEX:

```
\renderHTMLsymbol{~}{nbsp}
```

But now we need a replacement `\tilde` for URLs involving home directories of institution members (should better be `\tildechar` or `\TildeChar`, cf. fifinddo):

```
{\@makeother\~ \gdef\tilde{~} \gdef\tildechar{~}}
```

Horizontal ellipsis: `\dots` ...

```
\renderHTMLsymbol {\dots} {hellip}
```

`\copyright`:

```
\renderHTMLsymbol{\copyright}{copy}
```

`\bullet`

```
\renderHTMLsymbol{\bullet}{bull}
```

`\euro`:

```
\declareHTMLsymbol{euro}
```

LaTeX's \S prints the "section sign" '§'. In HTML, the latter accessed by §, we "redirect" \S to this:

```
\renderHTMLsymbol{\S}{sect}
```

\dagger, \ddagger:

```
\renderHTMLsymbol{\dagger}{dagger}
\renderHTMLsymbol{\ddagger}{Dagger}
```

3.9 TeX-related

Somebody actually using blog.sty must have a need to put down notes about TeX for her own private purposes at least—I expect.

3.9.1 Logos

"Program" names might be typeset in a special font, I once thought, and started tagging program names with \prg. It could be \texttt or \textsf like in documentations of LaTeX packages. However, sans-serif is of doubtable usefulness on web pages, and typewriter imitations usually look terrible on web pages. So I am waiting for a better idea and let \prg just remove the braces.

```
\newcommand*{\prg}[1]{} \let\prg\@firstofone
\newcommand*{\BibTeX}{\prg{BibTeX}} %% 2010/09/13
\renewcommand*{\TeX}{\prg{TeX}}
\renewcommand*{\LaTeX}{\prg{LaTeX}}
\newcommand*{\allTeX}{\prg{(La)TeX}}%% 2010/10/05
\newcommand*{\LuaTeX}{\prg{LuaTeX}}
\newcommand*{\pdfTeX}{\prg{pdfTeX}}
\newcommand*{\XeTeX}{\prg{XeTeX}}   %% 2010/10/09
\newcommand*{\TeXbook}{TeXbook}     %% 2010/09/13
```

3.9.2 Describing Macros

With v0.4, TeX-related *links* are moved to texlinks.sty.

\texcs{\⟨*tex-cmd-name*⟩} or \texcs\⟨*tex-cmd-name*⟩ (care for spacing yourself):

```
\newcommand*{\texcs}[1]{\code{\string#1}}           %% 2010/11/13
```

Good old \cs{⟨*tex-cmd-name*⟩} may be preferable:

```
\def\cs#1{\code{\BackslashChar#1}}                  %% 2011/03/06
```

\metavar{⟨*name*⟩}:

```
\newcommand*{\metavar}[1]{\angled{\meta{#1}}}
```

3.10 Tables

3.10.1 Indenting

There are three levels of indenting:

`\indenti`, `\indentii`, and `\indentiii`.

The intention for these was to get readable HTML code. Not sure ...

```
{\catcode`\ =12%% 2010/05/19
\gdef\indenti{  }\gdef\indentii{    }\gdef\indentiii{      }}
```

3.10.2 Starting/Ending Tables

2010/07/17:

```
\newcommand*{\startTable}[1]{<table #1>}
\def\endTable{</table>}
\newcommand*{\@frame@box}{\@frame{box}}
\newcommand*{\@frame@groups}{\@frame{groups}}
\newenvironment{allrulestable}[2]
  {\startTable{\@cellpadding{#1} \@width{#2}
               \@frame@box\ rules="all"}\CLBrk  %% \ 2011/10/12
   \indenti\tbody}               %% <- tbody 2011/10/13 ->
  {\indenti\endtbody\CLBrk\endTable}
```

`<tbody>...</tbody>` seemed to be better with `\HVspace` for blogdot.sty, so it gets a macro:

```
\useHTMLelement{tbody}{tbody}
```

3.10.3 Rows

I first thought it would be good for readability if some HTML comments explain nesting or briefly describe the content of some column, row, or cell. But this is troublesome when you want to comment out an entire table ...

```
\newenvironment*{TableRow}[2]{%% lesser indentation 2011/04/25
  \ \comment{ #1 }\CLBrk
  \indenti<tr #2>%
  }{%
  \indenti</tr>}
\newenvironment{tablecoloredrow}[2]
  {\TableRow{#1}{\@bgcolor{#2}}}
  {\endTableRow}
```

"top" 2010/05/18:

```
\newenvironment{tablerow}[1]{\TableRow{#1}{\@valign@t}}
                            {\endTableRow}
```

2010/07/18:

```
\newcommand*{\starttr}{<tr>}
\def\endtr{</tr>}
```

3.10.4 Cells

```
\newcommand*{\simplecell}{\SimpleTagSurr{td}}   %% 2010/07/18
% \newcommand*{\TableCell}[2]{\indentiii<td #1>#2</td>}
% \newcommand*{\TableCell}[2]{\indentiii\TagSurr{td}{#1}{#2}}
  %% <- 2010/07/18 ->
\newcommand*{\TableCell}[2]{\indentiii\startTd{#1}#2\endTd}
```

2010/06/15:

```
\newcommand*{\colorwidthcell}[2]{\TableCell{\@bgcolor{#1}\@width{#2}}}
\newcommand*{\tablewidthcell}[1]{\TableCell{\@width{#1}}}
\newcommand*{\tablecell}        {\TableCell{}}
\newcommand*{\tableCell}        {\TableCell\@align@c}
```

Idea: use closing star for environment variants!?

```
% %% 2010/05/19:
\newenvironment{bigtablecell}[1]{\BigTableCell{#1}{}}
                                {\endBigTableCell}
%                {\ifx\\#1\\%             %% 2010/05/30
%                   \indentii\ \comment{#1}\CLBrk
%                 \fi
%                 \indentiii<td>}
%                {\indentii</td>}         %% !? 2010/05/23
```

2010/06/05:

```
\newenvironment{BigTableCell}[2]
    {\ifx\\#1\\\indentii\ \comment{#1}\CLBrk\fi
     \indentiii\startTd{#2}}
    {\indentii\endTd}           %% TODO indent? 2010/07/18
```

2010/07/18:

```
\newcommand*{\startTd}[1]{<td #1>}
\def\endTd{</td>}
\newcommand*{\emptycell}{<td />}    %% 2011/10/07
```

3.10.5 Filling a Row with Dummy Cells

Generalization 2010/06/28:

```
% \newcommand*{\FillRow}[2]{%             %% broke line 2011/01/24
%                   \indentiii\TagSurr{td}{\@colspan{#1} #2}{}}
  %% <- 2010/07/18 ->
\newcommand*{\FillRow}[2]{\indentiii\startTd{\@colspan{#1} #2}\endTd}
\newcommand*{\fillrow}[1]{\FillRow{#1}{}}
\newcommand*{\fillrowcolor}[2]{\FillRow{#1}{\@bgcolor{#2}}}
```

3.10.6 Skipping Tricks

`\HVspace{⟨text⟩}{⟨width⟩}{⟨height⟩}` may change, needed for blogdot.sty but also for `\vspace{⟨height⟩}` with texblog. It is now here so I will be careful when I want to change something. `<tbody>` improved the function of `\HVspace` constructions as link text with blogdot.sty.

```
369  \newcommand*{\HVspace}[3]{%
370      \CLBrk
371      \startTable{\@width{#2} \@height{#3}
372                  \@border{0}
373                  \@cellpadding{0} \@cellspacing{0}}%
374        \tbody
375         \CLBrk                                          %% 2011/10/14
376          \tablerow{HVspace}%                            %% 2011/10/13
```

← inserting text at top for blogdot attempts—that finally did not help anything (2011/10/15) →

```
377            \simplecell{#1}%
378          \endtablerow                                   %% 2011/10/13
379         \CLBrk                                          %% 2011/10/14
380        \endtbody
381      \endTable
382      \CLBrk}
```

`\hvspace{⟨width⟩}{⟨height⟩}` . . . :

```
383  \newcommand*{\hvspace}{\HVspace{}}
```

`\vspace{⟨height⟩}` . . . (TODO: `{0}`!?):

```
384  \renewcommand*{\vspace}[1]{\hvspace{}{#1}}
```

3.11 Misc

`\comment{⟨comment⟩}` produces a one-line HTML comment. By contrast, there is an environment `{commentlines}{⟨comment⟩}` for multi-line comments. It is convenient for "commenting out" code (unless the latter contains other HTML comments . . .) where ⟨*comment*⟩ is a *comment* for explaining what is commented out.

```
385  \newcommand*{\comment}[1]{<!--#1-->}
386  % \newcommand{\commentlines}[1]{\comment{^^J#1^^J}} %% 2010/05/07
387  %   %% <- TODO bzw. \endlinechar='\^^J 2010/05/09 back 2010/05/10
388  \newenvironment{commentlines}[1]                     %% 2010/05/17
389    {<!--#1}
390    {-->}
```

TEX's `\hrule` (rather deprecated in LATEX) is redefined to produce an HTML horizontal line:

```
391 \renewcommand*{\hrule}{<hr>}
```

Redefining `\␣` to be the same as `\space` may be helpful for manual indenting or spacing of HTML code. Or better (just now remembering): I used it for making "ASCII trees" with the `<pre>` element (redefined `verbatim`).

```
392 \let\ \space
```

I couldn't find a perfect way to generate `<p>`. Actually I started completing the present documentation when I had decided to implement automatic generation of `<p>` from empty lines.

```
393 % \def\par{<p>} %% + empty lines !? 2010/04/26
```

← difficult with `\stop`; 2010/09/10: `\endgraf` produces `</p>`!?

```
394 \renewcommand*{\endgraf}{</p>}
```

2010/04/28: `<br>` can be generated either by `\newline` or by `\\`:

```
395 \renewcommand*{\newline}{<br>}
396 \let\\\newline
```

`\rightpar{`⟨*text*⟩`}` places ⟨*text*⟩ flush right. I have used this for 'Last revised ...' and for placing navigation marks.

```
397 \newcommand*{\rightpar}{\TagSurr p\@align@r}  %% 2010/06/17
```

Often I use `\rightpar` with *italics*, now there is `\rightitpar{`⟨*text*⟩`}` for this purpose:

```
398 \newcommand*{\rightitpar}[1]{\rightpar{\textit{#1}}}
```

For references, there were

```
399 % \catcode`\^=\active
400 % \def^#1{\SimpleTagSurr{sup}{#1}}
```

and

```
401 % \newcommand*{\src}[1]{\SimpleTagSurr{sup}{[#1]}}
```

as of 2010/05/01, inspired by the `<ref>` element of MediaWiki; moved to `xmlprint.tex` 2010/06/02.

3.12 The End

```
402 \endinput
```

3.13 VERSION HISTORY

```
v0.1    2010/08/20  final version for DFG
v0.2    2010/11/08  final documentation version before
                    moving some functionality to 'fifinddo'
v0.3    2010/11/10  removed ^^J from \head
        2010/11/11  moving stuff to fifinddo.sty; \BlogCopyFile
        2010/11/12  date updated; broke too long code lines etc.;
                    \CatCode replaced (implemented in niceverb only);
                    \ifBlogAutoPars etc.
        2010/11/13  doc: \uml useful in ...; \texcs
        2010/11/14  doc: argument for {commentlines},
                         referring to environments with curly braces,
                         more on \ditem
        2010/11/15  TODO: usage, templates
        2010/11/16  note on {verbatim}
        2010/11/23  doc. corr. on \CtanPkgRef
        2010/11/27  "keyword"; \CopyLine without `fd'
        2010/12/03  \emhttpref -> \ithttpref
        2010/12/23  `%' added to \texhaxpref
        2011/01/23  more in \Provides...
        2011/01/24  updated copyright; resolving `td' ("today")
        JUST STORED as final version before texlinks.sty
v0.4    2011/01/24  moving links to texlinks.sty
v0.41   2011/02/07  \NormalHTTPref
        2011/02/10  refined call of `texlinks'
part of MOREHYPE RELEASE r0.3
v0.5    2011/02/22  \BlogProvidesFile
        2011/02/24  ... in \BlogCopyFile
        2011/02/25  ordering symbols
        2011/02/26  subsection Greek; note on \declareHTMLsymbol
        2011/03/04  diacritics
        2011/03/06  \cs
        2011/03/09  \var
        2011/03/16  \robots
        2011/03/19  doc. \fileancref arg.s corr.
        2011/03/29  \Sigma, ...
        2011/03/31  \minus
        2011/04/04  \times, \sub, \delta
        2011/04/11  Greek completed
        2011/04/14  \emptyset
        2011/04/22  \deqtd
        2011/04/24  doc.: folding, \stylesheet, ordered "tables";
                    @border, @align, @valign
        2011/04/25  lesser indentation with TableRow
        2011/04/26  \,, \thinspace, \@title; doc. \@name
        2011/04/28  [\circ] PROBLEM still
        2011/04/29  \rightitpar
        2011/05/07  \cdot
        2011/05/08  extended doc. on math symbols; \sdot;
```

```
451                     \ast replaces \lowast; \subset, \subseteq;
452                     \angled
453          2011/05/09  \euro
454          2011/05/11  |\geq| etc.; new section "logical markup"
455          2011/05/12  corr. doc. \heading
456          2011/05/14  right mark of \deqtd was rsquo instead of lsquo!
457          2011/05/18  \S and note on \StoreOtherCharAs
458          2011/06/27  \httpsref; doc: \acro
459          2011/07/22  \thinspace vs. \thinsp; 'fifinddo''s
460          2011/07/25  "todo" on \description
461          2011/08/18f.removing \FileRef, 0.42-> 0.5
462          2011/08/31  clarified use of \urlapostr
463   part of MOREHYPE RELEASE r0.4
464   v0.6   2011/09/08  doc. uses \HTML, \lq/\rq with &circ;,
465                     doc. fix `mult-'; \degrees
466          2011/09/21  \acronym
467          2011/09/22  \metavar; TODO \glqq...
468          2011/09/23  \bdquo
469          2011/09/25  doc. `Characters/Symbols'; \figurespace
470          2011/09/27  "universal" attributes completed, reworked doc.
471          2011/09/30  end lists with </li>
472          2011/10/01  \dagger, \ddagger
473          2011/10/04  \item includes </li> [2011/10/11: ???]
474          2011/10/05  {style}; doc. \acronym -> \acro, \pagebreak,
475                     rm. \description; {center} accesses <center>,
476                     \useHTMLenvironment replaces \declareHTMLelement
477                     and \renderHTMLelement, message "generating"
478          2011/10/07  \emptycell
479          2011/10/10  doc.: page breaks, $$->\[/\]
480   part of MOREHYPE RELEASE r0.5
481   v0.61  2011/10/11  </li> in \item again, \Provides... v wrong
482          2011/10/12  \hnewref, `\ ' in allrulestable
483          2011/10/14  \CLBrk's
484          2011/10/15  doc. note on \HVspace/blogdot
485   part of MOREHYPE RELEASE r0.51
486   v0.62  2011/10/16  \hyperlink, \hypertarget; doc. fixes there
487          2011/10/20  \textcolor by <span>, \textsf
488          2011/10/21  \ctanref now in texlinks.sty;
489                     doc.: grammar with `that'
490          2011/10/22  \BlogCopyFile message removed
491
```

4 Real Web Pages with lnavicol.sty

This is the code and documentation of the package mentioned in Sec. 2.2.

```
\ProvidesPackage{lnavicol}[2011/10/13
                           left navigation column with blog.sty]
%%
%% Copyright (C) 2011 Uwe Lueck,
%% http://www.contact-ednotes.sty.de.vu
%% -- author-maintained in the sense of LPPL below --
%%
%% This file can be redistributed and/or modified under
%% the terms of the LaTeX Project Public License; either
%% version 1.3c of the License, or any later version.
%% The latest version of this license is in
%%    http://www.latex-project.org/lppl.txt
%% We did our best to help you, but there is NO WARRANTY.
%%
%% Please report bugs, problems, and suggestions via
%%
%%   http://www.contact-ednotes.sty.de.vu
```

4.1 blog.sty Required

—but what about options (TODO)?

```
\RequirePackage{blog}
```

4.2 Switches

There is a “standard” page width and a “tight one” (the latter for contact forms)—`\iftight`:

```
\newif\iftight
```

In order to move an anchor to the *top* of the screen when the anchor is near the page end, the page must get some extra length by adding empty space at its bottom—`\ifdeep`:

```
\newif\ifdeep
```

4.3 Page Style Settings (to be set locally)

```
% \newcommand*{\pagebgcolor}{\#f5f5f5}  %% CSS whitesmoke
% \newcommand*{\pagespacing}{\@cellpadding{4} \@cellspacing{7}}
% \newcommand*{\pagenavicolwidth}{125}
% \newcommand*{\pagemaincolwidth}{584}
% \newcommand*{\pagewholewidth}  {792}
```

4.4 Possible Additions to **blog.sty**

4.4.1 Tables

`\begin{spancolscell}{`⟨*number*⟩`}{`⟨*style*⟩`}` opens an environment that contains a row and a single cell that will span ⟨*number*⟩ table cells and have style ⟨*style*⟩:

```
\newenvironment{spancolscell}[2]{%
    \starttr\startTd{\@colspan{#1} #2 %
                     \@width{100\%}}% %% TODO works?
    }{\endTd\endtr}
```

The `{hiddencells}` einvironment contains cells that do not align with other cells in the surrounding table. The purpose is using cells for horizontal spacing.

```
\newenvironment{hiddencells}
    {\startTable{}\starttr}
    {\endtr\endTable}
```

`{pagehiddencells}` is like `{hiddencells}` except that the HTML code is indented:

```
\newenvironment{pagehiddencells}
    {\indentii\hiddencells}
    {\indentii\endhiddencells}
```

`\begin{FixedWidthCell}{`⟨*width*⟩`}{`⟨*style*⟩`}` opens the `{FixedWidthCell}` environment. The content will form a cell of width ⟨*width*⟩. ⟨*style*⟩ are additional formatting parameters:

```
\newenvironment{FixedWidthCell}[2]
    {\startTd{#2}\startTable{\@width{#1}}%
     \starttr\startTd{}}
    {\endTd\endtr\endTable\endTd}
```

`\tablehspace{`⟨*width*⟩`}` is a variant of LaTeX's `\hspace{`⟨*glue*⟩`}`. It may appear in a table row:

```
\newcommand*{\tablehspace}[1]{\startTd{\@width{#1} /}}
```

4.4.2 Graphics

The command names in this section are inspired by the names in the standard LaTeX graphics package. (They may need some re-organization TODO.)

`\simpleinclgrf{`⟨*file*⟩`}` embeds a graphic file ⟨*file*⟩ without the tricks of the remaining commands.

```
\newcommand*{\simpleinclgrf}[1]{\IncludeGrf{alt="" \@border{0}}%
                                           {#1}}
```

`\IncludeGrf{`⟨*style*⟩`}{`⟨*file*⟩`}` embeds a graphic file ⟨*file*⟩ with style settings ⟨*style*⟩:

```
\newcommand*{\IncludeGrf}[2]{<img #1 src="#2">}
```

`\includegraphic{`⟨*width*⟩`}{`⟨*height*⟩`}{`⟨*file*⟩`}{`⟨*border*⟩`}{`⟨*alt*⟩`}{`⟨*tooltip*⟩`}` ...:

```
\newcommand*{\includegraphic}[6]{%
    \IncludeGrf{%
        \@width{#1} \@height{#2} %% data; presentation:
        \@border{#4}
        alt="#5" \@title{#6}}%
        {#3}}
```

`\insertgraphic{`⟨*wd*⟩`}{`⟨*ht*⟩`}{`⟨*f*⟩`}{`⟨*b*⟩`}{`⟨*align*⟩`}{`⟨*hsp*⟩`}{`⟨*vsp*⟩`}{`⟨*alt*⟩`}{`⟨*t*⟩`}` adds ⟨*hsp*⟩ for the `@hspace` and ⟨*vsp*⟩ for the `@vspace` attribute:

```
\newcommand*{\insertgraphic}[9]{%
    \IncludeGrf{%
        \@width{#1} \@height{#2} %% data; presentation:
        \@border{#4}
        align="#5" hspace="#6" vspace="#8"
        alt="#8" \@title{#9}}%
        {#3}}
```

`\includegraphic{`⟨*wd*⟩`}{`⟨*ht*⟩`}{`⟨*file*⟩`}{`⟨*anchor*⟩`}{`⟨*border*⟩`}{`⟨*alt*⟩`}{`⟨*tooltip*⟩`}` uses an image with `\includegraphic` parameters as a link to ⟨*anchor*⟩:

```
\newcommand*{\inclgrfref}[7]{%
    \fileref{#4}{\includegraphic{#1}{#2}{#3}%
                                 {#5}{#6}{#7}}}
```

4.4.3 HTTP/Wikipedia tooltips

`\httptipref{`⟨*tip*⟩`}{`⟨*www*⟩`}{`⟨*text*⟩`}` works like `\httpref{`⟨*www*⟩`}{`⟨*text*⟩`}` except that ⟨*tip*⟩ appears as "tooltip":

```
\newcommand*{\httptipref}[2]{%
  \TagSurr a{\@title{#1}\@href{http://#2}\@target@blank}}
```

`\@target@blank` abbreviates the `@target` setting for opening the target in a new window or tab:

```
\newcommand*{\@target@blank}{target="_blank"}
```

`\wikitipref{`⟨*lc*⟩`}{`⟨*lem*⟩`}{`⟨*text*⟩`}` works like `\wikiref{`⟨*lc*⟩`}{`⟨*lem*⟩`}{`⟨*text*⟩`}` except that "Wikipedia" appears as "tooltip". `\wikideref` and `\wikienref` are redefined to use it:

```
\newcommand*{\wikitipref}[2]{%
    \httptipref{Wikipedia}{#1.wikipedia.org/wiki/#2}}
\renewcommand*{\wikideref}{\wikitipref{de}}
\renewcommand*{\wikienref}{\wikitipref{en}}
```

4.5 Page Structure

The body of the page is a table of three rows and two columns.

4.5.1 Page Head Row

`\PAGEHEAD` opens the head row and a single cell that will span the two columns of the second row.

```
\newcommand*{\PAGEHEAD}{%
  \startTable{%
    \@align@c\
    \@bgcolor{\pagebgcolor}%
    \@border{0}%%                          %% TODO local
    \pagespacing
    \iftight \else \@width\pagewholewidth \fi
  }\CLBrk
  %% omitting <tbody>
  \ \comment{ HEAD ROW }\CLBrk
  \indenti\spancolscell{2}{}%
}
% \newcommand*{\headgrf}  [1]{%                      %% rm. 2011/10/09
%     \indentiii\simplecell{\simpleinclgrf{#1}}}
% \newcommand*{\headgrfskiptitle}[3]{%
%   \pagehiddencells
%     \headgrf{#1}\CLBrk
%     \headskip{#2}\CLBrk
%     \headtitle1{#3}\CLBrk
%   \endpagehiddencells}
```

`\headuseskiptitle{`⟨*grf*⟩`}{`⟨*skip*⟩`}{`⟨*title*⟩`}` first places ⟨*grf*⟩, then skips horizontally by ⟨*skip*⟩, and then prints the page title as `<h1>`:

```
\newcommand*{\headuseskiptitle}[3]{%
  \pagehiddencells\CLBrk
    \indentiii\simplecell{#1}\CLBrk
    \headskip{#2}\CLBrk
    \headtitle1{#3}\CLBrk
  \endpagehiddencells}
```

`\headskip{`⟨*skip*⟩`}` is like `\tablehspace{`⟨*skip*⟩`}` except that the HTML code gets an indent.

```
\newcommand*{\headskip}    {\indentiii\tablehspace}
```

Similarly, `\headtitle{`⟨*digit*⟩`}{`⟨*text*⟩`}` is like `\heading`⟨*digit*⟩`{`⟨*text*⟩`}` apart from an indent and being put into a cell:

```
\newcommand*{\headtitle}[2]{\indentiii\simplecell{\heading#1{#2}}}
```

4.5.2 Navigation and Main Row

`\PAGENAVI` closes the head row and opens the "navigation" column, actually including an `{itemize}` environment. Accordingly, `writings.fdf` has a command `\fileitem`. But it seems that I have not been sure ...

```
\newcommand*{\PAGENAVI}{%
    \indenti\endspancolscell\CLBrk
    \indenti\starttr\CLBrk
    \ \comment{NAVIGATION COL}\CLBrk
    \indentii\FixedWidthCell\pagenavicolwidth
                            {\@class{paper}
```

← using `@class`=`paper` here is my brother's idea, not sure about it ...

```
                            \@valign@t}
    %% omitting '\@height{100\%}'
    \itemize}
```

`\PAGEMAINvar{`⟨*width*⟩`}` closes the navigation column and opens the "main content" column. The latter gets width ⟨*width*⟩:

```
\newcommand*{\PAGEMAINvar}[1]{%
    \indentii\enditemize\ \endFixedWidthCell\CLBrk
    \ \comment{ MAIN COL }\CLBrk
    \indentii\FixedWidthCell{#1}{}}
```

... The width may be specified as `\pagemaincolwidth`, then `\PAGEMAIN` works like `\PAGEMAINvar{\pagemaincolwidth}`:

```
\newcommand*{\PAGEMAIN}{\PAGEMAINvar\pagemaincolwidth}
```

4.5.3 Footer Row

`\PAGEFOOT` closes the "main content" column as well as the second row, and opens the footer row:

```
\newcommand*{\PAGEFOOT}{%
    \indentii\endFixedWidthCell\CLBrk
%     \indentii\tablehspace{96}\CLBrk %% vs. \pagemaincolwidth
  %% <- TODO margin right of foot
    \indenti\endtr\CLBrk
    \ \comment{ FOOT ROW / }\CLBrk
    \indenti\spancolscell{2}{\@class{paper} \@align@c}%
```

← again class "paper"!?

```
}
```

`\PAGEEND` closes the footer row and provides all the rest ... needed?

```
\newcommand*{\PAGEEND}{\indenti\endspancolscell\endTable}
```

4.6 The End and HISTORY

```
\endinput

HISTORY

2011/04/29   started (? \if...)
2011/09/01   to CTAN as 'twocolpg.sty'
2011/09/02   renamed
2011/10/09f. documentation more serious
2011/10/13   '...:' OK

```

5 Beamer Presentations with blogdot.sty

5.1 Overview

blogdot.sty extends blog.sty in order to construct "HTML slides." One "slide" is a 3×3 table such that

1. it **fills** the computer **screen**,
2. the center cell is the **"type area,"**
3. the "margin cell" below the center cell is a **link** to the **next** "slide,"
4. the lower right-hand cell is a **"restart"** link.

Six **size parameters** listed in Sec. 5.4 must be adjusted to the screen in `blogdot.cfg` (or in a file with project-specific definitions).

We deliver a file `blogdot.css` containing CSS font size declarations that have been used so far; you may find better ones or ones that work better with your screen size, or you may need to add style declarations for additional HTML elements.

Another parameter that the user may want to modify is the **"restart" anchor name** `\BlogDotRestart` (see Sec. 5.6). Its default value is `START` for the "slide" opened by the command `\titlescreenpage` that is defined in Sec. 5.5.

That slide is meant to be the "**title** slide" of the presentation. In order to **display** it, I recommend to make and use a **link** to `START` somewhere (such as with blog.sty's `\ancref` command). The *content* of the title slide is *centered* horizontically, so certain commands mentioned *below* (centering on other slides) may be useful.

After `\titlescreenpage`, the next main **user commands** are

`\nextnormalscreenpage{`⟨*anchor-name*⟩`}` starts a slide whose content is aligned flush left,

`\nextcenterscreenpage{`⟨*anchor-name*⟩`}` starts a slide whose content is centered horizontally.

—cf. Sec. 5.7. Right after these commands, as well as right after `\titlescreen`'`\-`page', code is used to generate the content of the **type area** of the corresponding slide. Another `\next...` command closes that content and opens another slide. The presentation (the content of the very last slide) may be finished using `\screenbottom{`⟨*final*⟩`}` where ⟨*final*⟩ may be arbitrary, or `START` may be a fine choice for ⟨*final*⟩.

Finally, there are user commands for **centering** slide content horizontically (cf. Sec. 5.8):

`\cheading{`⟨*digit*⟩`}{`⟨*title*⟩`}` "printing" a heading centered horizontically—even on slides whose remaining content is aligned *flush left* (I have only used ⟨*digit*⟩=2 so far),

`\begin{`⟨*textblock*⟩`}{`⟨*width*⟩`}` "printing" the content of a `{textblock}` environment with maximum line width ⟨*width*⟩ flush left, while that "block" as a whole may be centered horizontically on the slide due to choosing `\nextcenterscreenpage`—especially for **list** environments with entry lines that are shorter than the type area width and thus would not look centered (below a centered heading from `\cheading`).

The so far single **example** of a presentation prepared using blogdot is `dantev45.htm` (fifinddo-info bundle), a sketch of applying fifinddo to package documentation and HTML generation. A "driver" file is needed for generating the HTML code for the presentation from a `.tex` source by analogy to generating any HTML file using blog.sty. For the latter purpose, I have named my driver files `makehtml.tex`. For `dantev45.htm`, I have called that file `makedot.tex`, the main difference to `makehtml.tex` is loading `blogdot.sty` in place of `blog.sty`.

This example also uses a file `dantev45.fdf` that defines some commands that may be more appropriate as user-level commands than the ones presented here (which may appear to be still too low-level-like):

`\teilpage{`⟨*number*⟩`}{`⟨*title*⟩`}` making a "cover slide" for announcing a new "part" of the presentation in German,

`\labelsection{`⟨*label*⟩`}{`⟨*title*⟩`}` starting a slide with heading ⟨*title*⟩ and with anchor ⟨*label*⟩ (that is displayed on clicking a *link* to ⟨*label*⟩)—using

`\nextnormalscreenpage{`⟨*label*⟩`}` and `\cheading2{`⟨*title*⟩`}`,

`\labelcentersection{`⟨*label*⟩`}{`⟨*title*⟩`}` like the previous command except that the slide content will be *centered* horizontally, using

`\nextcenterscreenpage{`⟨*title*⟩`}`.

Reasons to make HTML presentations may be: (i) As opposed to office software, this is a transparent light-weight approach. Considering *typesetting* slides with TEX, (ii) TEX's advanced typesetting abilities such as automatical page breaking are not very relevant for slides; (iii) a typesetting run needs a

second or a few seconds, while generating HTML with blog.sty needs a fraction of a second; (iv) adjusting formatting parameters such as sizes and colours needed for slides is somewhat more straightforward with HTML than with TEX.

Limitations: First I was happy about how it worked on my netbook, but then I realized how difficult it is to present the "slides" "online." Screen sizes (centering) are one problem. (Without the "restart" idea, this might be much easier.) Another problem is that the "hidden links" don't work with Internet Explorer as they work with Firefox, Google Chrome, and Opera. And finally, in internet shops some HTML entities/symbols were not supported. In any case I (again) became aware of the fact that HTML is not as **"portable"** as PDF.

Some **workarounds** are described in Sec. 5.9. `\FillBlogDotTypeArea` has two effects: (i) providing an additional link to the *next* slide for MSIE, (ii) *widening* and centering the *type area* on larger screens than the one which the presentation originally was made for. An optional argument of `\TryBlogDotCFG` is offered for a `.cfg` file overriding the original settings for the presentation. Using it, I learnt that for "portability," some manual line breaks (`\\`, `<br>`) should be replaced by "ties" between the words *after* the intended line break (when the line break is too ugly in a wider type area). For keeping the original type area width on wider screens (for certain "slides", perhaps when line breaks really are wanted to be preserved), the `{textblock}` environment may be used. Better HTML and CSS expertise may eventually lead to better solutions.

The **name** 'blogdot' is a "pun" on the name of the powerdot package (which in turn refers to "PowerPoint").

5.2 File Header

```
1  \NeedsTeXFormat{LaTeX2e}[1994/12/01] %% \newcommand* etc.
2  \ProvidesPackage{blogdot}[2011/10/22 v0.4 HTML presentations (UL)]
3  %% copyright (C) 2011 Uwe Lueck,
4  %% http://www.contact-ednotes.sty.de.vu
5  %% -- author-maintained in the sense of LPPL below.
6  %%
7  %% This file can be redistributed and/or modified under
8  %% the terms of the LaTeX Project Public License; either
9  %% version 1.3c of the License, or any later version.
10 %% The latest version of this license is in
11 %%     http://www.latex-project.org/lppl.txt
12 %% We did our best to help you, but there is NO WARRANTY.
13 %%
14 %% Please report bugs, problems, and suggestions via
15 %%
16 %%   http://www.contact-ednotes.sty.de.vu
17 %%
```

5.3 blog Required

blogdot is an extension of blog (but what about options? TODO):

```
\RequirePackage{blog}
```

5.4 Size Parameters

I assume that it is clear what the following six page dimension parameters

`\leftpagemargin`, `\rightpagemargin`, `\upperpagemargin`, `\lowerpagemargin`, `\typeareawidth`, `\typeareaheight`

mean. The choices are what I thought should work best on my 1024×600 screen (in fullscreen mode); but I had to optimize the left and right margins experimentally (with Mozilla Firefox 3.6.22 for Ubuntu canonical - 1.0). It seems to be best when the horizontal parameters together with what the brouswer adds (scroll bar, probably 32px with me) sum up to the screen width.

```
\newcommand*{\leftpagemargin}{176}
\newcommand*{\rightpagemargin}{\leftpagemargin}
```

So `\rightpagemargin` ultimately is the same as `\leftpagemargin` as long as you don't redefine it, and it suffices to `\renewcommand \leftpagemargin` in order to get a horizontically centered type area with user-defined margin widths.—Something analogous applies to `\upperpagemargin` and `\lowerpagemargin`:

```
\newcommand*{\upperpagemargin}{80}
\newcommand*{\lowerpagemargin}{\upperpagemargin}
```

A difference to the "horizontal" parameters is (I expect) that the position of the type area on the screen is affected by `\upperpagemargin` only, and you may choose `\lowerpagemargin` just large enough that the next slide won't be visible on any computer screen you can think of.

```
\newcommand*{\typeareawidth}{640}
\newcommand*{\typeareaheight}{440}
```

Centering with respect to web page body may work better on different screens (2011/10/03), but it doesn't work here (2011/10/04).

```
% \renewcommand*{\body}{%
%     </head>\CLBrk
%     <body \@bgcolor{\bodybgcolor} \@align@c>}
```

`\CommentBlogDotWholeWidth` procuces no HTML code ...

```
\global\let\BlogDotWholeWidth\@empty
```

... unless calculated with `\SumBlogDotWidth`:

```
\newcommand*{\SumBlogDotWidth}{%
    \relax{%                        %% \relax 2011/10/22 magic ...
    \count@\typeareawidth
    \advance\count@ \leftpagemargin
    \advance\count@\rightpagemargin
    \typeout{ * blogdot slide width = \the\count@\space*}%
    \xdef\CommentBlogDotWholeWidth{%
        \comment{ slide width = \the\count@\ }}}}
```

5.5 (Backbone for) Starting a "Slide"

`\startscreenpage{`⟨*style*⟩`}{`⟨*anchor-name*⟩`}`

```
\newcommand*{\startscreenpage}[2]{%% 0 2011/09/25!?:
    \startTable{%
        \@cellpadding{0} \@cellspacing{0}%
        \maybe@blogdot@borders          %% 2011/10/12
        \maybe@blogdot@frame            %% 2011/10/14
    }%
    \CLBrk                              %% 2011/10/03
    \starttr
```

First cell determines both height of upper page margin `\upperpagemargin` and width of left page margin `\leftpagemargin`:

```
        \startTd{\@width {\leftpagemargin }%
                 \@height{\upperpagemargin}}%
%         \textcolor{\bodybgcolor}{XYZ}%
        \endTd
```

Using `\typeareawidth`:

```
%       \startTd{\@width{\typeareawidth}}\endTd
        \simplecell{%
          \CLBrk
          \hanc{#2}{\hvspace{\typeareawidth}%
                           {\upperpagemargin}}%
          \CLBrk
        }%
```

Final cell of first row determines right margin width:

```
        \startTd{\@width{\leftpagemargin}}\endTd
    \endtr
    \starttr
    \emptycell\startTd{\@height{\typeareaheight}#1}%
}
```

`\titlescreenpage` (`\STARTscreenpage` TODO?) opens the title page (I thought). To get it to your screen, (make and) click a link like

`\ancref{START}{start␣presentation}` :

```
\newcommand*{\titlescreenpage}{%
    \startscreenpage{\@align@c}{START}}
```

5.6 Finishing a "Slide" and "Restart" (Backbone)

`\screenbottom{`⟨*next-anchor*⟩`}` finishes the current slide and links to the ⟨*next-anchor*⟩, the anchor of a slide opened by

`\startscreenpage{`⟨*style*⟩`}{`⟨*next-anchor*⟩`}`.

More precisely, the margin below the type area is that link. The corner at its right is a link to the anchor to whose name `\BlogDotRestart` expands.

```
\newcommand*{\screenbottom}[1]{%
    \ifFillBlogDotTypeArea
      <p>\ancref{#1}{\BlogDotFillText}%    %% not </p> 2011/10/22
    \fi
    \endTd\emptycell
    \endtr
    \CLBrk
    \tablerow{bottom margin}%                        %% 2011/10/13
      \emptycell
      \CLBrk
      \startTd{\@align@c}%
        \ancref{#1}{\HVspace{\BlogDotBottomFill}%
```

← seems to be useless now (2011/10/15).

```
                              {\typeareawidth}%
                              {\lowerpagemargin}}%
      \endTd
      \CLBrk
      \simplecell{\ancref{\BlogDotRestart}%
                          {\hvspace{\rightpagemargin}%
                                   {\lowerpagemargin}}}%
    \endtablerow
    \CLBrk
    \endTable
}
```

The default for `\BlogDotRestart` is `START`—the title page. You can `\renewcommand` it so you get to a slide containing an overview of the presentation.

```
\newcommand*{\BlogDotRestart}{START}
```

5.7 Moving to Next "Slide" (User Level)

`\nextscreenpage{`⟨*style*⟩`}{`⟨*anchor-name*⟩`}` puts closing the previous slide and opening the next one—having anchor name ⟨*anchor-name*⟩—together. ⟨*style*⟩ is for style settings for the next page, made here for choosing between centering the page/slide content and aligning it flush left.

```
\newcommand*{\nextscreenpage}[2]{%
    \screenbottom{#2}\CLBrk
    \hrule           \CLBrk
    \startscreenpage{#1}{#2}}
```

`\nextcenterscreenpage{`⟨*anchor-name*⟩`}` chooses centering the slide content:

```
\newcommand*{\nextcenterscreenpage}{\nextscreenpage{\@align@c}}
```

`\nextnormalscreenpage{`⟨*anchor-name*⟩`}` chooses flush left on the type area determined by `\typeareawidth`:

```
\newcommand*{\nextnormalscreenpage}{\nextscreenpage{}}
```

5.8 Constructs for Type Area

If you want to get centered titles with `<h2>` etc., you should declare this in `.css` files. But you may consider this way too difficult, and you may prefer to declare this right in the HTML code. That's what I do! I use `\cheading{`⟨*digit*⟩`}{`⟨*text*⟩`}` for this purpose.

```
\newcommand*{\cheading}[1]{\CLBrk\TagSurr{h#1}{\@align@c}}
```

`\begin{textblock}{`⟨*width*⟩`}` opens a `{textblock}` environment. The latter will contain text that will be flush left in a narrower text area—of width ⟨*width*⟩—than the one determined by `\typeareawidth`. It may be used on "centered" slides. It is made for lists whose entries are so short that the page would look unbalanced under a centered title with the list adjusted to the left of the entire type area. (Thinking of standard LaTeX, it is almost the `{minipage}` environment, however lacking the footnote feature, in that respect it is rather similar to `\parbox` which however is not an environment.)

```
\newenvironment*{textblock}[1]
    {\startTable{\@width{#1}}\starttr\startTd{}}
    {\endTd\endtr\endTable}
```

5.9 Debugging and `.cfgs`

`\ShowBlogDotBorders` shows borders of the page margins and may be undone by `\DontShowBlogDotBorders`:

```
\newcommand*{\ShowBlogDotBorders}{%
    \def\maybe@blogdot@borders{rules="all"}}
\newcommand*{\DontShowBlogDotBorders}{%
    \let\maybe@blogdot@borders\@empty}
\DontShowBlogDotBorders
```

`\ShowBlogDotFrame` shows borders of the page margins and may be undone by `\DontShowBlogDotFrame`:

```
\newcommand*{\ShowBlogDotFrame}{%
    \def\maybe@blogdot@frame{\@frame@box}}
\newcommand*{\DontShowBlogDotFrame}{%
    \let\maybe@blogdot@frame\@empty}
\DontShowBlogDotFrame
```

However, the rules seem to affect horizontal positions ...

`\BlogDotFillText` is a dirty trick ... seems to widen the type area and this way centers the text on wider screens than the one used originally. Of course, this can corrupt intended line breaks.

```
\newcommand*{\BlogDotFillText}{%            %% 2011/10/11
    \center
        \BlogDotFillTextColor{%             %% 2011/10/12
%                X\\X                       %% insufficient
                X X X X X X X X X X X X X X X X X X X X
                X X X X X X X X X X X X X X X X X X X X
                X X X X X X X X X
                X X X X X X X X X
%                 X X X X X X X X X X X X X X X X X X X X
        }
    \endcenter
}
```

`\FillBlogDotTypeArea` fills `\BlogDotFillText` into the type area, also as a link to the next slide. This may widen the type area so that the text is centered on wider screens than the one the HTML page was made for. The link may serve as an alternative to the bottom margin link (which sometimes fails). `\FillBlogDotTypeArea` can be undone by `\DontFillBlogDotTypeArea`:

```
\newcommand*{\FillBlogDotTypeArea}{%
    \let\ifFillBlogDotTypeArea\iftrue
    \typeout{ * blogdot filling type area *}}       %% 2011/10/13
\newcommand*{\DontFillBlogDotTypeArea}{%
    \let\ifFillBlogDotTypeArea\iffalse}
\DontFillBlogDotTypeArea
```

`\FillBlogDotBottom` fills `\BlogDotFillText` into the center bottom cell. I tried it before `\FillBlogDotTypeArea` and I am not sure ... It can be undone by `\DontFillBlogDotBottom`:

```
\newcommand*{\FillBlogDotBottom}{%
    \let\BlogDotBottomFill\BlogDotFillText}
```

... actually, it doesn't seem to make a difference! (2011/10/13)

```
\newcommand*{\DontFillBlogDotBottom}{\let\BlogDotBottomFill\@empty}
\DontFillBlogDotBottom
```

`\DontShowBlogDotFillText` makes `\BlogDotFillText` invisible, `\ShowBlogDotFillText` makes it visible. Until 2011/10/22, `\textcolor` (blog.sty) used the `<font>` element that is deprecated. I still use it here because it seems to suppress the `hover` CSS indication for the link. (I might offer a choice—TODO)

```
\newcommand*{\DontShowBlogDotFillText}{%
%     \def\BlogDotFillTextColor{\textcolor{\bodybgcolor}}}
```

```
131     \def\BlogDotFillTextColor{%
132         \TagSurr{font}{color="\bodybgcolor"}}}
133 \newcommand*{\ShowBlogDotFillText}{%
134     \def\BlogDotFillTextColor{\textcolor{red}}}
135 \DontShowBlogDotFillText
```

As of 2011/10/21, texlinks.sty provides `\ctanfileref{`⟨*path*⟩`}{`⟨*file-name*⟩`}` that uses an online TEX archive according to

`\usemirrorctan` or `\usetugctan`.

This is preferable for an online version of the presentation. In `dantev45.htm`, this is used for example files. When, on the other hand, internet access during the presentation is bad, such example files may instead be loaded from the "current directory." `\usecurrdirctan` modifies `\ctanfileref` for this purpose (i.e., it will ignore ⟨*path*⟩):

```
136 \newcommand*{\usecurrdirctan}{%
137     \renewcommand*{\ctanfileref}[2]{%
138         \hnewref{}{##2}{\filenamefmt{##2}}}}
```

(Using a local TDS tree would be funny, but I don't have good idea for this right now.)

`\TryBlogDotCFG` looks for `blogdot.cfg`,

`\TryBlogDotCFG[`⟨*file-name-base*⟩`]`

looks for ⟨*file-name-base*⟩`.cfg` (for recompiling a certain file):

```
139 \newcommand*{\TryBlogDotCFG}[1][blogdot]{%
140     \InputIfFileExists{#1.cfg}{%
141         \typeout{
142             * Using local settings from \string`#1.cfg\string' *}%
143     }{}%
144 }
145 \TryBlogDotCFG
```

5.10 The End and HISTORY

```
146 \endinput
```

VERSION HISTORY

```
147 v0.1    2011/09/21f.  started
148         2011/09/25    spacing/padding off
149         2011/09/27    \CLBrk
150         2011/09/30    \BlogDotRestart
151         used for DANTE meeting
152 v0.2    2011/10/03    four possibly independent page margin
153                       parameters; \hvspace moves to texblog.fdf
154         2011/10/04    renewed \body commented out
155         2011/10/07    documentation
```

```
156           2011/10/08    added some labels
157           2011/10/10    v etc. in \ProvidesPackage
158           part of morehype RELEASE r0.5
159   v0.3    2011/10/11    \HVspace, \BlogDotFillText
160           2011/10/12    commands for \BlogDotFillText
161           2011/10/13    more doc. on "debugging";
162                         \ifFillBlogDotTypeArea, \tablerow, messages
163           2011/10/14    \maybe@blogdot@frame
164           2011/10/15    doc. note: \HVspace useless
165           part of morehype RELEASE r0.51
166   v0.4    2011/10/21    \usecurrdirctan
167           2011/10/22    FillText with <p> instead of </p>, its color
168                         uses <font>; some more reworking of doc.
169
```