Another letter class, etc.

**A class and style for producing flexible
letters and page headings**

(using zero width boxes and converting length to counters)

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The targets – 1
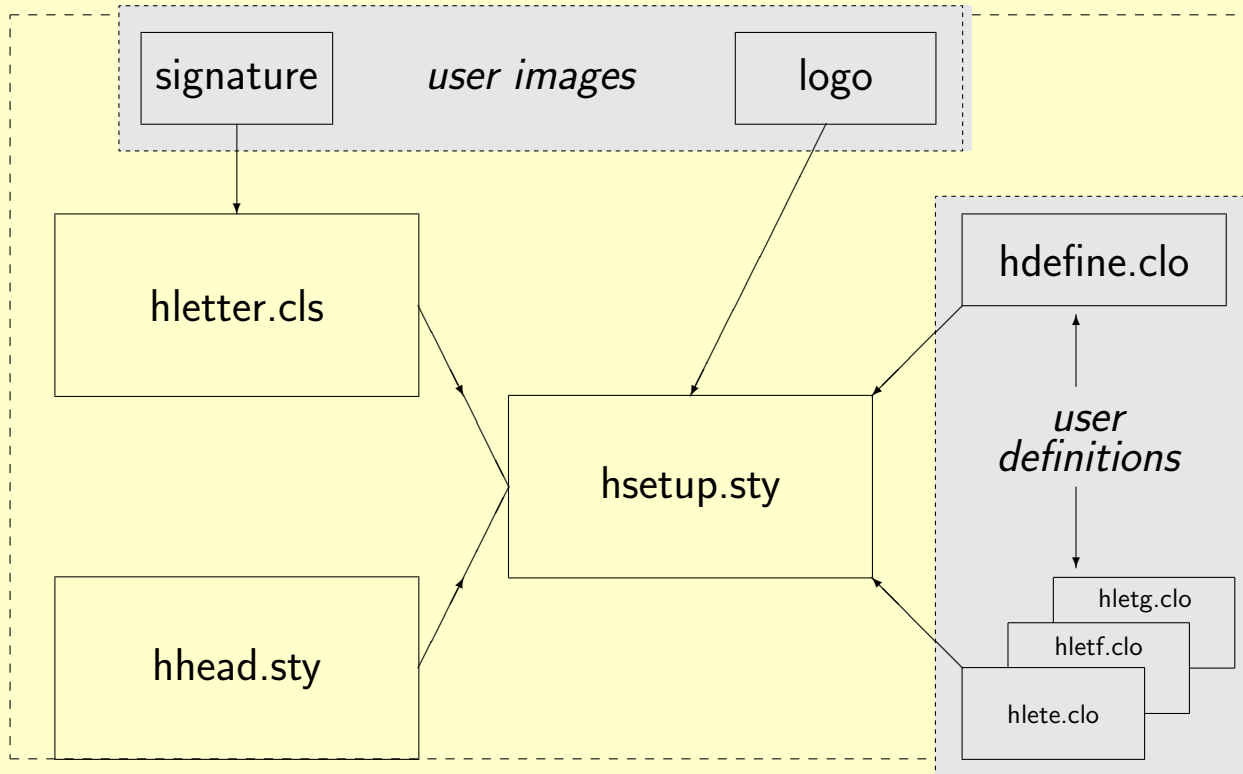
▷   Permit the user to specify key-words which, together with the default or specified language, invoke various styles of the heading.

▷   With letters one may define an option to produce a private letter, i.e., one with no logo but a from-address.

▷   The header is always centred, at the top of A4 paper.

▷   Ensure the to-address is centred in a C5/C6^a window envelope.

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^{a}I would have supported the North American stationery sizes but I have no access to such envelopes, etc.

The targets – 2

▷ The text for the heading together with the footer is produced by key-words dependent on a user defined option.

▷ Use a style file to produce headings as for letters with a horizontal rule underneath.

▷ A command `\closingtwo` may be used to produce letters with two signees.

▷ The *merge* package by Graeme McKinstry works.

▷ A scanned signature may be used — especially useful with *merge* letters.

Files used in producing letters and headings

signature   *user images*   logo

hletter.cls

hdefine.clo

user definitions

hsetup.sty

hhead.sty

hletg.clo
hletf.clo
hlete.clo

The shaded files must be produced by the user

How most of the fields are defined

Image file \logo{...}

\centrepos

\centreA   \addressA
\centreB   \addressB
\centreC   \addressC
\centreD   \extraA
\centreE   \extraB
\centreF   \extraC

[COPY]

picture box →

M. Francois Marie Arouet
6, rue du Grand Chêne
Lausanne
Switzerland

Lausanne, le 15 septembre 1922

Impressions of the journey from Vevey to Lausanne.

Dear Voltaire,

Cully, midway between Vevey and Lausanne, is a little town of 1,100 inhabi-
in the vineyards of Cully.

The records of Cully go back to the 10th. century. It once belonged to the
bishops [1], who did little but quarrel about their claims since the town was in the

————————————————

1. The bishop princes of the old regime.

\bottomL   \bottomC   \bottomR
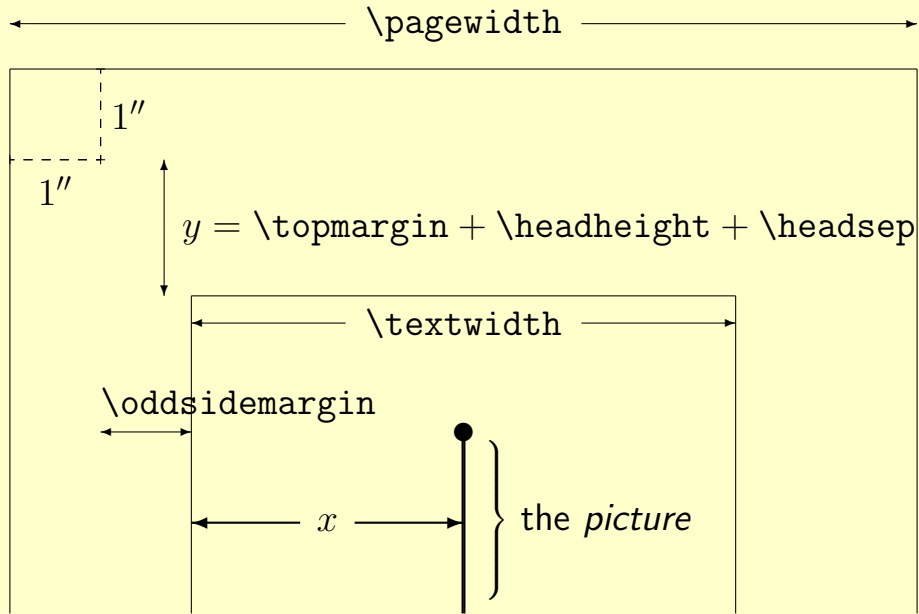
Layout of the header

▷ Letter header and *simple* headers are different but the *picture* which generated them must have the same origin relative to the top of the paper.

▷ The position of the origin is calculated when the header is generated so user changes to page layout are taken into account.

Horizontal positioning

Space horizontally by x and make a picture of zero width. Obviously

$$x = .5\backslash\texttt{pagewidth} - 1'' - \backslash\texttt{oddsidemargin}$$

Vertical positioning

▷ For letters the header stretches to the bottom of the *to-address* box (for a C5/C6 envelope) which is 91 mm from the top of the paper.

▷ For a simple header the bottom of the header is 41 mm from the top.

▷ For the letter we calculate $h = 91\,\text{mm} - 1'' - y$ and if this is negative a warning is issued.

▷ For the header we calculate $h = 41\,\text{mm} - 1'' - y$ but if the logo is large the depth of the picture is increased, say by z.

Making the picture

▷ The value h is a length variable but for a picture we require a counter in `\unitlength` units.

▷ Define a counter, c, and set it to the length h. The counter has the calculated height in scaled points, the internal units of TeX. We simply divide the counter by `\unitlength` and we have the correct but truncated value for the picture.

▷ For a letter the command

```
\begin{picture}(0,c)(0,-41)
```

produces the picture to contain the header.

▷ The simple header uses `\begin{picture}(0,c)(0,-z)` and if the document is in two-column format then the command `\twocolumn` is used to ensure that the header spans the two columns.

The user files

▷ To specify the various types of letters and headings the user must supply the files `hdefine.clo` and `hlet<ln>.clo`.

▷ Here is an example of `hdefine.clo` where four user options are defined and also a default logo is specify :

```
% example hdefine.clo
\logo{GCCS}

\newoption{private}{1}
\newoption{signit}{2}
\newoption{bruni}{3}
\newoption{test}{4}
```

▷ The package simply defines the command:

```
\newcommand*{\newoption}[2]{\DeclareOption{#1}%
  {\global\hltype=#2}\typeout{*** Option #2 has name #1}}
```

The other user files

hlet<*lng*>.clo: For each of the languages English, French and German which are used the user must provide a file which defines the fields for the option specified in hdefine.clo, e.g., hlete.clo for English.

logo: The command \logo[ht]{file} sets the logo file and if the optional height is not specified then 24 mm is used. This command may be used in the definition file and/or in the *hlet* file(s).

signature: A scanned signature may be inserted — particulary useful for merge letters. Define the file with the command \sign[ht]{file} and if *ht* is not specified then it will be 15 mm high.

The structure of the file(s) hlete.clo, etc.

```
% Letter options for English
\ifcase\hltype
% case = 0 (no option - GCCS default)
 definitions for default case
\or
% case = 1 (private)
  \address{...
    defining an address give a private letter
   ...}
\or
% case = 2 (signit)
 definitions for signit option
\or
% case = 3 (bruni)
 definitions for bruni option
\else
% all other cases (should never be used)
  \addressA{?} \addressB{?} \addressC{?}
  \extraA{Telephone: ?} \extraB{Telefax: ?} \extraC{eMail: ?}
\fi
```

Creating a letter and a header

▷   Assuming that the *define* file and the *hlet* files have been created one creates a letter in the usual LaTeX way with a few additional commands.

▷   The class hletter is used with options point size, language (default English) and maybe one of the user options defines in `hdefine.clo` which the selects the required letter type.

▷   To create a header one loads the package hhead with any optional argument such as language. A header is produce with the command `\heading` which has an optional argument which if used will be printed top right of the page.

▷   If `\heading` is used more than once in a document then a `\cleardoublepage` is issued and the page count is reset.

Short summary of the letter commands – 1

`\signature` The single argument is the name under the closing signature. Terminal multiple lines with \\.

`\address` The from-address and, when used, makes a private letter without a logo. Terminal multiple lines with \\.

`\reference` If used the argument is set centred under the opening for English and above, left justified, otherwise.

`letter` *environment*: Starts the letter and the argument is the *to-address*.

`\date` Set the date to be printed under the header.

`\opening` This command has an optional argument which, when used, is placed in typewriter font at the top right of the letter, e.g.,
                `\opening[{[COPY]}]{Dear Voltaire,}`.

`\closing` The argument is the closing text above the signature. Terminal multiple lines with \\.

Short summary of the letter commands – 2

`\closingtwo` Supplies the closing which is centred above *two* signatures. The `\signature` command should contain two names, each line separated with an '&' as in tabular (which it is), e.g.:

```
\signature{Dr.~A. Boss & Mr.~B. Bitt \\ CEO & CIO}
...
\closingtwo{Yours Faithfully,}
```

`\encl` A list of enclosures; multiple lines separated with \\.

`\cc` A list of persons who are to receives copies of the letter; multiple lines separated with \\.

Merge letters

▷   The package *merge* from Graeme McKinstry works well. It reads a file of **{to-address, opening}** pairs which are used to create letters which are addressed to many recipients.

▷   a small modification to `merge.sty` has been made so that *after* the first address pair one can insert a % as the first character of a line which will then be ignored. The modified version is called `mergeh.sty`.

▷   When TeX reads from an external file it honours grouped lines, i.e., to enter the address over many lines in the merge file (new lines terminating with \\) enclose the address in {...}. The packages uses a tabular to set the to-address so these brackets, *if present*, must be removed.

Getting rid of the extra brackets

Fortunately the TeX-Book (as usual) provides the answer and the to-address is produced with the, at first look, rather strange commands:

```
\def\dotoaddress#1{\setbox0\hbox{\expandafter\cmda#1}
    \ifnum\myc=1\settoaddress{#1}\else
    \expandafter\settoaddress#1\relax\fi}
\def\settoaddress#1{\global\setbox\addrbox
    \hbox{\begin{tabular}{@{}l@{}}#1\end{tabular}}}
%
\newcount\myc
\def\cmda#1{\global\myc=0 \cmdb#1\end}
\def\cmdb#1{\ifx#1\end \let\next=\relax
   \else \global\advance\myc by1 \let\next=\cmdb\fi \next}
```

Example 1 (at last)

This example uses the default values from hlete.clo.

The LaTeX file contains:

```
\documentclass[11pt,english]{hletter}
\signature{Sir Frederick Treves\\
     Sergeant-Surgeon to His Majesty the King}
 \reference{Impressions of the journey from
     Vevey to Lausanne}
 \date{Lausanne, le 15 septembre 1922}
\begin{document}
 \begin{letter}{M. Francois Marie Arouet \\
                6, rue du Grand Ch\^{e}ne \\
                \textbf{Lausanne} \\ Switzerland}
 \opening[{[COPY]}]{Dear Voltaire,}
...
 \closing{I remain, Sir,\\yours Truly,}
 \cc{All Smiths in London\\ Mademoiselle S. Curchod}
 \encl{Tourist guide to Switzerland.\\ Plan of Cully.}
 \end{letter}
\end{document}
```

Example 1, continued

This uses the default (value=0) in the file `hlete.clo` which is:

```
\ifcase\hltype
% case = 0 (no option - GCCS default)
 \addressA{Largitzenstrasse 15}
 \addressB{CH--4056 Basle}
 \addressC{Switzerland}
 \extraA{Telephone: +41 (61) 345 78 90}
 \extraB{Telefax: +41 (61) 345 78 92}
 \extraC{eMail: info@gccs.com}
 \bottomL{Bank: VCT Unterwil, CH--4220 Unterwil/BL}
 \bottomR{Account: 322--956123.02R}
\or
```

The truncated output is show with the contents of the box and the
picture marked to see what is happening!

Largitzenstrasse 15
CH–4056 Basle
Switzerland
Telephone: +41 (61) 345 78 90
Telefax: +41 (61) 345 78 92
eMail: info@gccs.com

M. Francois Marie Arouet
6, rue du Grand Chêne
Lausanne
Switzerland

Lausanne, le 15 septembre 1922

Dear Voltaire,

Impressions of the journey from Vevey to Lausanne.

Cully, midway between Vevey and Lausanne, is a little town of 1,100 inhabi-
tants. It ... ok back very ... re was a time wh ...
... have seen ... amphibious
he cherished. S ... nearly two thousand years a votary of Bacchus lay hid in the
vineyards of Cully.

The records of Cully go back to the 10th. century. It once belonged to the

Bank: VCT Unterwil, CH–4220 Unterwil/BL   Account: 322–956123.02R

Example 2; a private letter

The document was similar to example 1 except it contained:

```
\documentclass[11pt,english,private]{hletter}
...
\signature{}
```

The `hlete.clo` file contained:

```
% case = 1 (private)
  \address{Hauptstrasse 15\\
      \textbfCH-4056 Basle\\
       Switzerland\\[1ex]
      \small Tel: +41 61 322 6382\\
      \small Fax: +41 61 383 8148\\
      \small Mobile: +41 76 337 4207\\
      \small eMail: brian.smith@epfl.ch}
  \or
```

A private letter

Hauptstrasse 15
CH-4056 Basle
Switzerland

Tel: +41 61 322 6382
Fax: +41 61 383 8148
Mobile: +41 76 337 4207
eMail: brian.smith@epfl.ch

[DRAFT]

Sir F. Treves, Bart.,
Vevey.
Switzerland

Lausanne, le 15 septembre 2008

Sir,

Impressions of Lausanne

Lausanne, the capital of the Canton of Vaud, is the smaller of the two cities of the
Lake. It stands ... to the beach at its foot. The town is far ... ope, being
about a mile and a quarter above the port of Ouchy.
tower of the days of the musketeers, which finds itself now very inappropriately placed
in a modest street of private houses.

Yours sincerely,

cc: All Smiths in London
    Mademoiselle S. Curchod
encl: Tourist guide to Switzerland.
      Plan of Cully.

Example 3

The document contained:

```
\documentclass[11pt,german,bruni]{hletter}
\begin{document}
 \signature{Dr.~C. Featherstonehaugh &
    Dr.~A. Beauchamp \\ CEO & CIO}
 \reference{Impressions of Lausanne}
 \date{Lausanne, le 15 septembre 2008}
 \begin{letter}{Sir F. Treves, Bart.,\\
   \textbf{Vevey.}\\ Switzerland}
 \opening[\textsc{[draft]}]{Sir,}
 ...
 \closingtwo{Yours Faithfully,}
 \cc{All Smiths in London\\ Mademoiselle S. Curchod}
 \encl{Tourist guide to Switzerland.\\ Plan of Cully.}
 \end{letter}
\end{document}
```

Bruni definitions in hletg.clo

This contained a larger logo, two signees, a rather special footer and it also changed the default fonts `\newfa` and `\newfc`.

The font `\newfa` is used for \addressA and \centreA; `\newfb` is used for address and centre B and C; all the other fields use `\newfc`.

The `\sign` command is ignored for two signees.

```
% case = 3 (bruni)
 \addressA{Der Glockenturm}
 \addressB{Hauptstrasse 54}
 \addressC{Upper Throgmortondale}
 \extraA{Telefon: +44 187 3546}
 \extraB{Telefax: +44 187 3547}
 \extraC{email: bruni@songs.flat.ac.uk}
 \centreA{Songs written \& sung}
 \centreB{Loudness no problem}
 \centreC{Flats \& sharps used}
 \centreD{\rule[.5ex]{16mm}{1pt}}    % a rule
 \centreE{Notes sometimes used}
 \centreF{Spears may be hurled}
 \centrepos{-10mm}
 \bottomL{$\ast\ast\ast\ast\ast$}    % a fancy footer
 \bottomC{Lullabies for children aged 7 to 70 our speciality}
 \bottomR{$\ast\ast\ast\ast\ast$}
 \sign[10mm]{signat}    \logo[50mm]{Bruennhilde}
 \DeclareFixedFont{\newfa}{OT1}{phv}{m}{n}{12pt}
 \DeclareFixedFont{\newfc}{OT1}{phv}{m}{sl}{10pt}
\or
```

First page of the Bruennhilde letter and the double closing

[DRAFT]

Songs written & sung
Loudness no problem
Flats & sharps used
————
Notes sometimes used
Spears may be hurled

Der Glockenturm
Hauptstrasse 54
Upper Throgmortondale
Telefon: +44 187 3546
Telefax: +44 187 3547
email: bruni@songs.flat.ac.uk

Sir F. Treves, Bart.,
Vevey.
Switzerland

Lausanne, le 15 septembre 2008

Impressions of Lausanne

Sir,

Lausanne, the capital of the Canton of Vaud, is the smaller of the two cities of the Lake. It stands on a green slope which glides, in leisurely fashion, from the ... owing to the hills and the villainous paving, Lausanne was, in his day, practically inaccessible to carriages. [1]

————————————
1. "Le Tour du Léman," par A. de Bougy, Paris, 1846.

* * * * *   *Lullabies for children aged 7 to 70 our speciality*   * * * * *

hill. It is a high round tower of the days of the musketeers, which finds itself now very inappropriately placed in a modest street of private houses.

Yours Faithfully,

Dr. C. Featherstonehaugh   Dr. A. Beauchamp
CEO   CIO

Example 4; a header

The document contained:

```
\documentclass[11pt,a4paper,twocolumn]{article}

\usepackage[german,bruni]{hhead}

\begin{document}
\setlength{\columnseprule}{.4pt}
\barlength{\textwidth}

\heading[\textsc{confidential}]
...
```

and the definitions in `hletg.clo` are more or less the same as example 3. Note that the commands to specify the header may be placed in the definition file, the *hlet* file or in the document itself.

A heading for Bruennhilde

Songs written & sung
Loudness no problem
Flats & sharps used

Notes sometimes used
Spears may be hurled

CONFIDENTIAL

Der Glockenturm
Hauptstrasse 54
Upper Throgmortondale
Telefon: +44 187 3546
Telefax: +44 187 3547
email: bruni@songs.flat.ac.uk

Impressions of the journey from Vevey to Lausanne.[1]

Bacchus was such that he kept this figure in his house. When the barbarians were seen to be swarmi...

Cully, midway between Vevey and Lausanne, a Bacchante. It would seem to tell the story of a Roman wine-grower whose admiration of

imagine him taking the image from its niche pretentious town is displayed by the number of old houses that it contains, and especially by

[1]From *The lake of Geneva* by Sir Frederick Treves (1922); chapter XXXVI

[2]*Carcans* of various types are to be seen in the Vevey Museum.

*****   Lullabies for children aged 7 to 70 our speciality   *****

Example 5; merge letter

The example uses the modified merge package and contains:

```
\documentclass[11pt,french,signit]{hletter}
\usepackage{mergeh}
\signature{A. Nother\\ Head of Batology Dept.}
\date{Lausanne, le 15 septembre 2008}
\begin{document}
 \reference{Impressions of the journey from
     Vevey to Lausanne}
 \begin{merge}{testmerge.dat}
 between Vevey and Lausanne, is a little town of ...

 ... Cully, but unfortunately the suggestion is unfounded.
 \closing{Yours Sincerely,}

 \vfill
 \cc{All Smiths in London\\ Mademoiselle S. Curchod}
 \encl{Tourist guide to Switzerland.\\ Plan of Cully.}
 \end{merge}
\end{document}
```

Part of testmerge.dat

```
{Professor Alfred B. Colquhoun\\
    Tittlebat Research Centre\\
    \textbf{Isle of Skye}\\
    Scotland}
Dear Prof.~Colquhoun,
%  old Coony
{Mr.~A. Miller\\
    23a, Council Flats\\
    Park Lane\\
    \textbf{London WC1}}
Dear Archibald,
% first Miller
Dr.~V. M\"{u}ller\\ Langstrasse 15\\ \textbf{3012 Bern}
Dear Vee,
%
```

```
%{Mr.~A. Nother\\
%   123 High street\\
%   \textbf{Nether Poppleton}\\
%   Nr. York\\ England}
%Hello Alf,
%% Skip alf today
{Viscountess Elizabeth Featherstonehaught-Cholmondeley\\
   Cathedral Close\\ \textbf{Winchester}}
My Dearest Elizabeth,
%
{Sir Archibald Bloggs\\
   Jones Old Yard\\
   Gasworks Lane\\
   \textbf{Throgmortendale}}
Howdy Sir Archie,
%
% NOTE: comments are allowed between the addresses
% but NOT before the first address --- but NO BLANK LINES!
```

Possible future improvements

▷ The first version was called *gletter* (for the company GCCS), *h* was the next letter so maybe a future version will be called *iletter*.

▷ One change which has been suggested is to make the dimensions of the headers easier to specify rather than changing values in the package. Also, the positioning of the text and logo should be more flexible.

▷ I really wish to sort out the present confusion in the package between the babel options *english* and *british*. At the moment specifying *english* invokes *british* which is really not correct. The reason for the mix is that english was original used and then it was requested that I also include british — but I was rather lazy!

▷ The support of North American stationery was planned but depends on when and if I acquire samples of the writing materials.

Thank you!

I hope you will find the package useful

Send any questions or suggestions to brian.housley@gccs.ch

(not the gardening company in the examples)