# Displaying page layout variables

Kent McPherson a.o.\*

2021-03-10

This file is maintained by the LATEX Project team. Bug reports can be opened (category tools) at https://latex-project.org/bugs.html.

## 1 Introduction

This  $\LaTeX$   $2_{\varepsilon}$  package is a reimplementation of layout.sty by Kent McPherson. It defines the command \layout which produces an overview of the layout of the current document. The command \layout\* recomputes the values it uses to produce the overview.

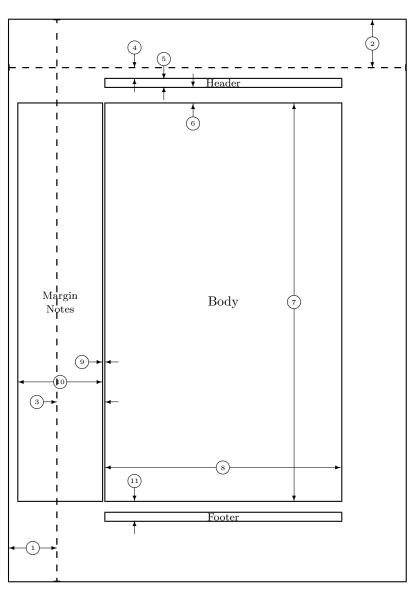
The figure on the next page shows the output of the **\layout** command for this document.

## 2 The implementation

This package prints a figure to illustrate the layout that is implemented by the document class. In the figure several words appear. They are stored in control sequences to be able to select a different language.

```
1 (*package)
2 \DeclareOption{dutch}{%
    \def\Headertext{Kopregel}
    \def\Bodytext{Broodtekst}
    \def\Footertext{Voetregel}
    \def\MarginNotestext{Marge\\Notities}
    \def\oneinchtext{een inch}
    \def\notshown{niet getoond}
8
9 }
10 \DeclareOption{german}{%
    \def\Headertext{Kopfzeile}
11
    \def\Bodytext{Haupttext}
12
    \def\Footertext{Fu{\ss}zeile}
    \def\MarginNotestext{Rand-\\ notizen}
    \def\oneinchtext{ein Zoll}
    \def\notshown{ohne Abbildung}
18 \DeclareOption{ngerman}{\ExecuteOptions{german}}
```

<sup>\*</sup>Converted for IATEX  $2\varepsilon$  by Johannes Braams and modified by Hideo Umeki



- one inch + \hoffset
- 3  $\odsidemargin = 73pt$
- \headheight = 12pt \textheight = 598pt
- \marginparsep = 5pt \footskip = 30pt \hoffset = 0pt 11 \paperwidth = 597pt
- 2 one inch + \voffset
- 4 \topmargin = 17pt
- \headsep = 25pt 6
- 8 textwidth = 355pt
- \marginparwidth = 126pt \marginparpush = 0pt (not shown) 10  $\voffset = Opt$ \paperheight = 845pt

```
19 \DeclareOption{english}{%
    \def\Headertext{Header}
20
    \def\Bodytext{Body}
21
    \def\Footertext{Footer}
22
    \def\MarginNotestext{Margin\\Notes}
23
    \def\oneinchtext{one inch}
    \def\notshown{not shown}
25
26
   }
27 \DeclareOption{french}{%
    \def\Headertext{Ent\^{e}te}
28
    \def\Bodytext{Corps}
29
    \def\Footertext{Pied de page}
30
    \def\MarginNotestext{Marge\\Notes}
31
    \def\oneinchtext{un pouce}
32
    \def\notshown{non affich\'{e}}
33
34
35 \DeclareOption{francais}{\ExecuteOptions{french}}
36 \DeclareOption{spanish}{%
    \def\Headertext{Encabezamiento}
37
    \def\Bodytext{Cuerpo}
38
    \def\Footertext{Pie de p\'agina}
39
    \def\MarginNotestext{Notas\\ Marginales}
40
    \def\oneinchtext{una pulgada}
41
    \def\notshown{no mostradas}
42
43
44 \DeclareOption{portuguese}{%
    \def\Headertext{Cabe\c{c}alho}
45
    \def\Bodytext{Corpo}
46
    \def\Footertext{Rodap\'e}
47
    \def\MarginNotestext{Notas\\ Marginais}
48
    \def\oneinchtext{uma polegada}
49
    \def\notshown{n\~ao mostradas}
50
51
52 \DeclareOption{brazilian}{%
    \def\Headertext{Cabe\c{c}alho}
53
    \def\Bodytext{Corpo}
54
    \def\Footertext{Rodap\'e}
55
56
    \def\MarginNotestext{Notas\\ Marginais}
57
    \def\oneinchtext{uma polegada}
    \def\notshown{n\~ao mostradas}
58
59
60 \DeclareOption{italian}{%
    \def\Headertext{Testatina}
61
    \def\Bodytext{Corpo}
62
    \def\Footertext{Piedino}
63
    \def\MarginNotestext{Note\\ Marginali}
64
    \def\oneinchtext{un pollice}
65
    \def\notshown{non mostrato}
66
67
68 \DeclareOption{romanian}{%
   \def\Headertext{Antet}
69
   \def\Bodytext{Corp}
70
    \def\Footertext{Subsol}
71
    \def\MarginNotestext{Note\\ Marginale}
```

```
\def\oneinchtext{un inch}
73
   \def\notshown{neafi\textcommabelow sat}
74
75
76 \DeclareOption{japanese}{%
   \def\Headertext{⊡}
77
   78
   \def\Footertext{⊡}
79
   \def\MarginNotestext{}(\)\
80
   \def\oneinchtext{1...}
81
   \def\notshown{\bullet\cdots}
82
83
```

This package has an option verbose. Using it will make the command \layout type some of the parameters on the terminal.

```
84 \DeclareOption{verbose}{\let\LayOuttype\typeout}
```

85 \DeclareOption{silent}{\let\LayOuttype\@gobble}

The normal behaviour of this package when showing the values of the parameters is to truncate them. However, if you want to see the real parameter values you can use the option reals to get that effect.

```
86 \def\lay@value{}
87 \DeclareOption{integers}{%
88 \renewcommand*{\lay@value}[2]{%
89 \expandafter\number\csname #1@#2\endcsname pt}}
90 \DeclareOption{reals}{%
91 \renewcommand*{\lay@value}[2]{\the\csname #2\endcsname}}
```

The default language is English, the default mode is silent and the default way of showing parameter values is to use integers.

```
92 \ExecuteOptions{english, silent, integers}
93 \ProcessOptions
```

\LayOutbs Define \LayOutbs to produce a backslash. We use a definition which also works with OT1 fonts.

```
94 \newcommand\LayOutbs{}
95 \chardef\LayOutbs'\\
```

\ConvertToCount This macro stores the value of a length register in a count register.

```
96 \def\ConvertToCount#1#2{%
```

First copy the value

97 #1=#2

Then divide it by 65536.

98 \divide #1 by 65536}

The result of this is that the *count* register holds the value of the *length* register in points.

```
\SetToHalf Small macros used in computing positions.
\SetToQuart 99 \def\SetToHalf#1#2{#1=#2\relax\divide#1by\tw@}
100 \def\SetToQuart#1#2{#1=#2\relax\divide#1by4}
```

```
\Identify A small macro used in identifying dimensions.
               101 \def\Identify#1{%
                    \put(\PositionX,\PositionY){\circle{20}}
               103
                     \put(\PositionX,\PositionY){\makebox(0,0){\tiny #1}}
               104 }
 \InsideHArrow This macro is used to produce two horizontal arrows inside a box. The argument
               gives the width of the box.
               105 \def\InsideHArrow#1{{%
                    \ArrowLength = #1
               106
                     \divide\ArrowLength by \tw@
               107
                     \advance\ArrowLength by -10
               108
                     \advance\PositionX by -10
               109
                    \ifnum\ArrowLength<\z0
               110
                       \put(\PositionX,\PositionY){\vector(1,0){-\ArrowLength}}
               111
               112
                       \advance\PositionX by 20
               113
                       \put(\PositionX,\PositionY){\vector(-1,0){-\ArrowLength}}
               114
                     \else
               115
                       \put(\PositionX,\PositionY){\vector(-1,0){\ArrowLength}}
               116
                       \advance\PositionX by 20
                       \put(\PositionX,\PositionY){\vector(+1,0){\ArrowLength}}
               117
                    \fi
               118
               119 }}
 \InsideVArrow This macro is used to produce two vertical arrows inside a box. The argument
               gives the height of the box.
               120 \def\InsideVArrow#1{{%
               121
                     \ArrowLength = #1
               122
                     \divide\ArrowLength by \tw@
               123
                     \advance\ArrowLength by -10
                     \advance\PositionY by -10
               124
                     \put(\PositionX,\PositionY){\vector(0,-1){\ArrowLength}}
               125
                    \advance\PositionY by 20
               126
                    \put(\PositionX,\PositionY){\vector(0,+1){\ArrowLength}}
               127
               128 }}
\OutsideHArrow This macro is used to produce two horizontal arrows to delimit a length. The first
               argument is the position for the right arrow, the second argument gives the length
               and the third specifies the length of the arrows.
               129 \def\OutsideHArrow#1#2#3{{%
                    \PositionX = #1
                     \advance\PositionX by #3
               131
                     \put(\PositionX,\PositionY){\vector(-1,0){#3}}
               133
                     \PositionX = #1 \advance\PositionX-#2
               134
                     \advance\PositionX by -#3
                     \put(\PositionX,\PositionY){\vector(+1,0){#3}}
               135
```

\OutsideVArrow This macro is used to produce two vertical arrows to delimit a length. The first argument is the position for the lower arrow, the second argument gives the length and the third and fourth specify the lengths of the lower and upper arrow.

```
137 \def\OutsideVArrow#1#2#3#4{{%
138 \PositionY = #1
```

136 }}

\put(\PositionX,\PositionY){\vector(0,+1){#3}}

\advance\PositionY by -#3

139

140

```
\P
                      141
                      142 \advance\PositionY#2
                          \advance\PositionY#4
                      143
                          \put(\PositionX,\PositionY){\vector(0,-1){#4}}
                      144
                      145 }}
               \Show Macro used in the table that shows the setting of the parameters.
                      146 \left( \frac{1}{40} \right) = \left( \frac{1}{40} \right)
               \Type Macro used to show a setting of a parameter on the terminal.
                      147 \def\Type#1#2{%
                      148 \LayOuttype{#2 = \lay@value{#1}{#2}}}
            \oneinch A constant, giving the length of an inch in points (approximately)
                      149 \newcount\oneinch
                      150 \oneinch=72
                         Because the overview of the layout is produced in a figure environment we
                      need to allocate a number of counters that are used to store the values of various
                      dimensions.
    \cnt@paperwidth The dimensions of the paper
   \verb|\cnt@paperheight||_{151} \verb|\newcount\cnt@paperwidth||
                      152 \newcount\cnt@paperheight
                      153 \ConvertToCount\cnt@paperwidth\paperwidth
                      154 \ConvertToCount\cnt@paperheight\paperheight
       \cnt@hoffset the offsets,
       \verb|\cnt@voffset||_{155} \verb|\newcount\cnt@hoffset||
                      156 \newcount\cnt@voffset
                      157 \ConvertToCount\cnt@hoffset\hoffset
                      158 \ConvertToCount\cnt@voffset\voffset
    \cnt@textheight dimensions of the text area,
     \verb|\cnt@textwidth||_{159} \verb|\newcount| cnt@textheight|
                      160 \verb|\newcount\cnt@textwidth|
     \cnt@topmargin margins,
 \verb|\cnt@oddsidemargin||_{161} \verb|\newcount\cnt@topmargin||
\verb|\cnt@evensidemargin|| 162 \verb|\newcount\cnt@oddsidemargin||
                      163 \newcount\cnt@evensidemargin
    \cnt@headheight dimensions of the running heads,
       \colored{cnt@headsep} 164 \newcount\cnt@headheight
                      165 \newcount\cnt@headsep
  \cnt@marginparsep marginal paragraphs,
\verb|\cnt@marginparwidth| 166 \verb|\newcount\cnt@marginparsep| \\
 \cnt@marginparpush 167 \newcount\cnt@marginparwidth
                      168 \verb|\newcount\cnt@marginparpush|
```

\cnt@footskip the distance between the running footers and the text,

169 \newcount\cnt@footskip

and the height of the footers, which is needed here to display a box, but which isn't used by LATEX.

#### \fheight

- 170 \newcount\fheight
- 171 fheight=12

Apart from integer representations of the page layout parameters we also need registers to store reference values in.

\ref@top The position of the top of the 'printable area' is one inch below the top of the paper by default. The value of \ref@top is relative to the lower left corner of the picture environment that will be used.

- 172 \newcount\ref@top
- 173 \ref@top=\cnt@paperheight \advance\ref@top by -\oneinch

### \ref@hoffset For the offsets,

- $\rowvert_{174} \rightarrow \rowvert_{174} \rightarrow \row$ 
  - 175 \newcount\ref@voffset

The \hoffset and \voffset values are added to the default offset of one inch.

- 176 \ref@hoffset=\cnt@hoffset \advance\cnt@hoffset by \oneinch
- 177 \ref@voffset=\cnt@voffset

\cnt@voffset is converted to be relative to the origin of the picture.

- 178 \cnt@voffset=\ref@top
- 179 \advance\cnt@voffset by -\ref@voffset

\ref@head and the text areas, running heads,

180 \newcount\ref@head

\ref@body body of the text

181 \newcount\ref@body

\ref@foot and running footers.

182 \newcount\ref@foot

\ref@margin These are different for even and odd pages, so they are computed by \layout.

- $\verb|\ref@marginwidth|_{183} \verb|\newcount| ref@margin|$ 

  - $\verb|\ref@marginpar| 184 \verb|\newcount| ref@marginwidth|$ 
    - 185 \newcount\ref@marginpar

The following are a number of scratch registers, used in the positioning of the various pices of the picture.

- 186 \newcount\Interval
- 187 \newcount\ExtraYPos
- 188 \newcount\PositionX
- 189 \newcount\PositionY
- 190 \newcount\ArrowLength

```
\lay@getvalues All values that might change during the document are computed by calling the
               macro \lay@getvalues. By default this macro is executed at \begin{document}.
               191 \def\lay@getvalues{%
                     \ConvertToCount\cnt@textheight\textheight
               192
                     \ConvertToCount\cnt@textwidth\textwidth
               193
                     \ConvertToCount\cnt@topmargin\topmargin
               194
                     \ConvertToCount\cnt@oddsidemargin\oddsidemargin
               195
                     \ConvertToCount\cnt@evensidemargin\evensidemargin
               196
               197
                     \ConvertToCount\cnt@headheight\headheight
               198
                     \ConvertToCount\cnt@headsep\headsep
                     \ConvertToCount\cnt@marginparsep\marginparsep
               200
                     \ConvertToCount\cnt@marginparwidth\marginparwidth
               201
                     \ConvertToCount\cnt@marginparpush\marginparpush
               202
                     \ConvertToCount\cnt@footskip\footskip
                     \ref@head=\ref@top
               203
                       \advance\ref@head by -\ref@voffset
               204
                       \advance\ref@head by -\cnt@topmargin
               205
                       \advance\ref@head by -\cnt@headheight
               206
               207
                     \ref@body=\ref@head
                       \advance\ref@body by -\cnt@headsep
               208
                       \advance\ref@body by -\cnt@textheight
               209
                     \ref@foot=\ref@body
               210
               211
                       \advance\ref@foot by -\cnt@footskip
               212
               213 \AtBeginDocument{\lay@getvalues}
\computevalues The command \layout makes the picture and table that display the current set-
       \layout tings of the layout parameters.
      \layout*
               214 \newcommand\layout{%
                    \@ifstar{\lay@getvalues\lay@xlayout}{\lay@xlayout}}
               216 \def\lay@xlayout{%
               217
                    \lay@layout
               218
                    \if@twoside
                       \lay@layout
               219
                     \fi}
               220
  \lay@layout The internal macro \lay@layout does all the dirty work.
               221 \newcommand\lay@layout{%
                    \thispagestyle{empty}
                  The actions of \layout depend on the pagestyle.
                     \if@twoside
               223
                       \ifodd\count\z@
                  Here we deal with an odd page in the twosided case.
                         \typeout{Two-sided document style, odd page.}
               225
                  So we compute \ref@marginwidth, \ref@marginpar and \ref@margin.
               226
                         \ref@marginwidth=\cnt@oddsidemargin
               227
                         \ref@marginpar=\oneinch
               228
                         \advance\ref@marginpar by \ref@hoffset
                         \advance\ref@marginpar by \cnt@oddsidemargin
               229
                         \ref@margin\ref@marginpar
               230
                         \if@reversemargin
               231
```

```
\advance\ref@marginpar by -\cnt@marginparsep
232
           \advance\ref@marginpar by -\cnt@marginparwidth
233
         \else
234
           \advance\ref@marginpar by \cnt@textwidth
235
           \advance\ref@marginpar by \cnt@marginparsep
236
         \fi
237
238
       \else
   Here we deal with an even page in the two ided case.
     \typeout{Two-sided document style, even page.}
239
   So we compute \ref@marginwidth, \ref@marginpar and \ref@margin.
         \ref@marginwidth=\cnt@evensidemargin
240
         \ref@marginpar=\oneinch
241
         \advance\ref@marginpar by \ref@hoffset
242
         \advance\ref@marginpar by \cnt@evensidemargin
243
244
         \ref@margin\ref@marginpar
         \if@reversemargin
245
246
           \advance\ref@marginpar by \cnt@textwidth
247
           \advance\ref@marginpar by \cnt@marginparsep
248
         \else
249
           \advance\ref@marginpar by -\cnt@marginparsep
           \advance\ref@marginpar by -\cnt@marginparwidth
250
251
         \fi
252
       \fi
253
     \else
   Finally we the case for single sided printing.
       \typeout{One-sided document style.}
254
       \ref@marginwidth=\cnt@oddsidemargin
255
       \ref@marginpar=\oneinch
256
       \advance\ref@marginpar by \ref@hoffset
257
       \advance\ref@marginpar by \cnt@oddsidemargin
258
       \ref@margin\ref@marginpar
259
260
       \if@reversemargin
         \advance\ref@marginpar by -\cnt@marginparsep
261
         \advance\ref@marginpar by -\cnt@marginparwidth
262
263
264
         \advance\ref@marginpar by \cnt@textwidth
265
         \advance\ref@marginpar by \cnt@marginparsep
266
       \fi
     \fi
267
   Now we begin the picture environment; dividing all the lengths by two is done
by setting \unitlength to 0.5pt
     \setlength{\unitlength}{.5pt}
268
     \begin{picture}(\cnt@paperwidth,\cnt@paperheight)
269
       \centering
270
       \thicklines
271
   First we have the pagebox and reference lines,
       \put(0,0){\framebox(\cnt@paperwidth,\cnt@paperheight){\mbox{}}}
272
       \put(0,\cnt@voffset){\dashbox{10}(\cnt@paperwidth,0){\mbox{}}}
273
274
       \put(\cnt@hoffset,0){\dashbox{10}(0,\cnt@paperheight){\mbox{}}}
```

```
then the header,
275
       \put(\ref@margin,\ref@head){%
         \framebox(\cnt@textwidth,\cnt@headheight)%
276
           {\footnotesize\Headertext}}
277
   the body of the text area,
       \put(\ref@margin,\ref@body){%
278
         \framebox(\cnt@textwidth,\cnt@textheight){\Bodytext}}
279
   the footer
       \put(\ref@margin,\ref@foot){%
280
         \framebox(\cnt@textwidth,\fheight){\footnotesize\Footertext}}
281
   and the space for marginal notes.
282
       \put(\ref@marginpar,\ref@body){%
283
         \framebox(\cnt@marginparwidth,\cnt@textheight)%
284
                   {\footnotesize\shortstack{\MarginNotestext}}}
   Then we start putting in 'arrows' to mark the various parameters. From here
we use \thinlines.
       \thinlines
   \PositionX and \PositionY will be the coordinates of the center of the arrow
displaying \textwidth.
       \SetToHalf\PositionX\cnt@textwidth
       \advance\PositionX by \ref@margin
287
The arrow should be a bit above the bottom of the 'body box'.
       \PositionY = \ref@body
       \advance\PositionY by 50
289
An identifying number is put here, in a circle.
290
       \Identify{8}
Then the arrow is drawn.
       \InsideHArrow\cnt@textwidth
   Now the \textheight
       \SetToHalf\PositionY\cnt@textheight
292
       \advance\PositionY by \ref@body
293
   The x-position of the arrow is at 4/5 of the width of the 'body box'.
       \PositionX = \cnt@textwidth
294
       \divide\PositionX by 5
295
       \multiply \PositionX by 4
296
       \advance\PositionX by \ref@margin
297
   An identifying number is put here, in a circle.
298
       \Identify{7}
299
       \InsideVArrow\cnt@textheight
   The \hoffset,
       \P PositionY = 50
300
301
       \SetToHalf\PositionX\cnt@hoffset
302
       \Identify{1}
       \InsideHArrow\cnt@hoffset
303
```

```
The width of the margin.
       \SetToQuart\PositionY\cnt@textheight
304
       \advance\PositionY by \ref@body
305
       \ifnum\ref@marginwidth > 0
306
307
         \OutsideHArrow\ref@margin\ref@marginwidth{20}
308
         \PositionX = \cnt@hoffset
309
         \OutsideHArrow\cnt@hoffset{-\ref@marginwidth}{20}
311
         \PositionX = \ref@margin
312
       \advance\PositionX by -30
313
       \Identify{3}
314
   the \marginparwidth,
       \SetToQuart\PositionY\cnt@textheight
315
       \advance\PositionY by \ref@body
316
This arrow has to be bit below the one for the \oddsidemargin or
\evensidemargin.
317
       \advance\PositionY by 30
318
       \SetToHalf\PositionX\cnt@marginparwidth
319
       \advance\PositionX by \ref@marginpar
320
       \Identify{10}
321
       \InsideHArrow\cnt@marginparwidth
   The \marginparsep, this depends on single or double sided printing.
       \advance\PositionY by 30
322
       \if@twoside
323
   Twosided mode, reversemargin;
         \if@reversemargin
324
           \ifodd\count\z@
325
              \OutsideHArrow\ref@margin\cnt@marginparsep{20}
326
327
              \PositionX = \ref@margin
              \OutsideHArrow\ref@marginpar\cnt@marginparsep{20}
330
              \PositionX = \ref@marginpar
           \fi
331
         \else
332
Not reversemargin;
333
           \ifodd\count\z@
334
              \OutsideHArrow\ref@marginpar\cnt@marginparsep{20}
335
              \PositionX = \ref@marginpar
336
              \OutsideHArrow\ref@margin\cnt@marginparsep{20}
337
              \PositionX = \ref@margin
338
           \fi
339
         \fi
340
341
       \else
   Single sided mode.
         \if@reversemargin
342
           \OutsideHArrow\ref@margin\cnt@marginparsep{20}
343
           \PositionX = \ref@margin
344
345
         \else
```

```
\OutsideHArrow\ref@marginpar\cnt@marginparsep{20}
346
           \PositionX = \ref@marginpar
347
         \fi
348
       \fi
349
       \advance\PositionX by -\cnt@marginparsep
350
       \advance\PositionX by -30
351
       \Identify{9}
352
   Identify the \footskip. The arrow will be located on 1/8th of the \textwidth.
       \PositionX = \cnt@textwidth
353
       \divide\PositionX by 8
354
355
       \advance\PositionX by \ref@margin
356
       \OutsideVArrow\ref@foot\cnt@footskip{20}{20}
       \PositionY = \ref@foot
357
       \advance\PositionY by \cnt@footskip
358
359
       \advance\PositionY by 30
       \Identify{11}
360
   Identify the \voffset. The arrow will be located a bit to the left of the edge
```

of the paper.

```
361
       \PositionX = \cnt@paperwidth
       \advance\PositionX by -50
362
       \PositionY = \cnt@paperheight
363
       \ExtraYPos = \PositionY
364
       \advance\ExtraYPos by -\cnt@voffset
365
       \advance\PositionY by \cnt@voffset
366
       \divide\PositionY by \tw@
367
       \Identify{2}
368
       \InsideVArrow\ExtraYPos
369
```

Identify \topmargin, \headheight and \headsep.

The arrows will be located on 1/8th of the \textwidth, with intervals of the same size, stored in \Interval.

```
370
       \Interval = \cnt@textwidth
       \divide\Interval by 8
371
372
       \PositionX = \ref@margin
       \advance\PositionX by \Interval
373
```

First the \topmargin. If \topmargin has a positive value, the arrow is upward. Otherwise, it is downward. The number label is always placed at the base of the arrow.

```
374
       \ifnum\cnt@topmargin > \z@
         \ExtraYPos = \ref@head
375
376
         \advance\ExtraYPos\cnt@headheight
377
         \OutsideVArrow\ExtraYPos\cnt@topmargin{20}{20}
         \PositionY = \ExtraYPos
378
         \advance\PositionY by \cnt@topmargin
379
380
         \ExtraYPos = \cnt@voffset
381
         \OutsideVArrow\ExtraYPos{-\cnt@topmargin}{20}{20}
382
         \PositionY = \ExtraYPos
383
         \advance\PositionY by -\cnt@topmargin
384
       \fi
385
       \advance\PositionY by 30
386
387
       \Identify{4}
```

```
\advance\PositionX by \Interval
388
Then the \headheight
       \OutsideVArrow\ref@head\cnt@headheight{20}{20}
389
       \PositionY = \ref@head
390
       \advance\PositionY by \cnt@headheight
391
       \advance\PositionY by 30
392
       \Identify{5}
393
394
       \advance\PositionX by \Interval
and finally the \headsep
       \ExtraYPos=\ref@body
395
       \advance\ExtraYPos\cnt@textheight
396
       \OutsideVArrow\ExtraYPos\cnt@headsep{20}{20}
397
       \PositionY = \ref@body
398
       \advance\PositionY by \cnt@textheight
399
       \advance\PositionY by -30
400
       \Identify{6}
401
   Here we can end the picture environment and insert a little space.
     \end{picture}
402
403
     \medskip
404
```

Below the picture we put a table to show the actual values of the parameters. Note that fractional points are truncated, i.e., 72.27pt is displayed as 72pt

The table is typeset inside a box with a depth of 0 to always keep it on the same page as the picture.

```
\vtop to Opt{%
405
406
       \@minipagerestore\footnotesize\ttfamily
407
       \begin{tabular}{@{}rl@{\hspace{20pt}}rl}
         1 & \oneinchtext\ + \LayOutbs\texttt{hoffset}
408
           & 2 & \oneinchtext\ + \LayOutbs\texttt{voffset} \\
409
         3 & \if@twoside
410
                \ifodd\count\z@ \Show{cnt}{oddsidemargin}
411
                \else \Show{cnt}{evensidemargin}
412
               \fi
413
             \else
414
                \Show{cnt}{oddsidemargin}
415
                                      & 4 & \Show{cnt}{topmargin} \\
416
         5 & \ \ \Show{cnt}{headheight} & 6 & \Show{cnt}{headsep} \\
417
418
         7 & \Show{cnt}{textheight} & 8 & \Show{cnt}{textwidth} \\
         9 & \ \ \Show{cnt}{marginparsep}&10& \Show{cnt}{marginparwidth} \\
419
         11& \Show{cnt}{footskip}
420
                                     &
                                          & \Show{cnt}{marginparpush}
          \rlap{(\notshown)}\\
421
           & \Show{ref}{hoffset}
                                     &
                                          & \Show{ref}{voffset} \\
422
           & \Show{cnt}{paperwidth} &
                                          & \Show{cnt}{paperheight} \\
423
424
     \end{tabular}\vss}
425
```

When the option verbose was used the following lines will show dimensions on the terminal.

```
426 \Type{ref}{hoffset}

427 \Type{ref}{voffset}

428 \Type{cnt}{textheight}

429 \Type{cnt}{textwidth}
```

Finally we start a new page.

- 430 \newpage
- 431 }
- $432~\langle/\mathsf{package}\rangle$