

CONTEXT

CONTEXT User Module

Environment for collating marks

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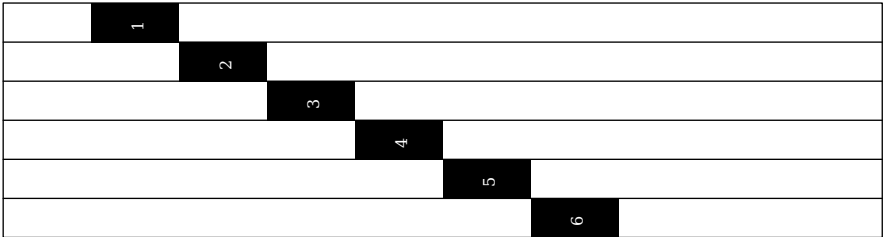
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Introduction

This code is based on the work of Thomas A. Schmitz, who created the module for different crop marks.

If a book consists of multiple sections, each section should be marked along the spine with a collating mark. This mark moves down along the spine according to the number of the section. After collating the book it becomes easy to check whether the sequence of the sections is correct. One should see a “stair case” on the spine of the book as shown in the following figure.



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Using the module

If the collating marks should be placed, then the system should be setup with

```
\usemodule[collatingmarks][Collatingmarks=yes]
\setupMPvariables
  [pages=8,
   sheets=2,
   horpageshift=0mm]
```

Note that the collating marks-setup needs to know how many pages are placed on a doublesided printed sheet of paper and how many such sheets result in a section i.e. these values depend on the `\setuparranging` command. The shift-option is 0 mm if no horizontal page shifting is issued during imposition. If a horizontal page shifting is used, then the shift option is used to position the collating mark precisely on the centre of the spine.

Be aware that the use of collating marks in MKII causes a lot of calls to METAPOST, resulting in very long compilation times.

So better use MKIV or LMTX where METAPOST is included as a library. In this case the time overhead is absolutely minimal.

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Vocabulary

EN: Collating mark, DE: Kollationiermarke, NL: collationeerblokje

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The module code

```

1 \writestatus{loading}{Context User Module / Collating Marks}
2 \unprotect
3 \setupmodule[Collatingmarks=yes]
4 \def\MCMpages{16}
5 \def\MCMsheets{1}
6 \def\MCMshift{0mm}
7 \setupMPvariables
8   [Collatingmarks]
9   [pages=\MCMpages, %pages per sheet doublesided
10    sheets=\MCMsheets,% number of sheets forming one section
11    horpageshift=\MCMshift]

```

We prepare collating marks:

```

12 \processaction[\currentmoduleparameter{Collatingmarks}]
13   [yes=>\def\Collatingmarks{Collatingmarks},
14   no=>\def\Collatingmarks{}],
15   \v!unknown=>\def\Collatingmarks{}],
16   \v!default=>\def\Collatingmarks{}]
17 \startusableMPgraphic{Collatingmarks}
18   StartPage;
19   numeric offset, sectionno, pages, sheets, factor, correction, offset, pageshift
20   ;
21   path p,q;
22   pages := \MPvar{pages};
23   sheets := \MPvar{sheets};
24   pageshift:=\MPvar{horpageshift};
25   z5col = ulcorner Page;
26   z6col = (x5col, y5col-10mm);
27   p := unitsquare xscaled 1mm yscaled 7mm;
28   if \realfolio mod 2 = 1 : % on uneven pages only
29     sectionno := \realfolio div (sheets*pages)+ 1;
30     label.lrt(texttext("\switchtobodyfont[5pt]"& decimal sectionno &""),llcorner
31     Page shifted (1mm,-2mm));
32     if \realfolio mod (sheets*pages) = 1 : % on the first page of a section
33       only
34       nofmarkings := (y6col-7mm) div 7mm;
35       offset := y6col-sectionno*7mm;
36       if sectionno > nofmarkings :
37         correction := sectionno div nofmarkings;
38         offset := y6col-(sectionno-correction*nofmarkings)*7mm;
39       fi;

```

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```
40      p := p shifted (-1mm-2pageshift,offset);
41      fill p withcolor black;
42      if sectionno < 9 :
43          label.rtl(texttext("\switchtobodyfont[3pt] \white "& decimal sectionno &"
44                               ), center p shifted (-1.3mm,0));
45      else :
46          label.rtl(texttext("\switchtobodyfont[3pt] \white "& decimal sectionno &"
47                               ), center p shifted (-1.5mm,0));
48      fi;
49      fi;
50  fi;
51  \stopusableMPgraphic
```

Implementation

Collating marks are calculated and drawn by METAPOST. The result is placed into an overlay which is used as a page background

```

\defineoverlay[Collatingmarks][\useMPgraphic{Collatingmarks}]
52 \defineoverlay[Collatingmarks][\useMPgraphic{Collatingmarks}]
    \setupbackgrounds[page][state=repeat,background={\Collatingmarks}]
53 \setupbackgrounds[page][state=repeat,background={\Collatingmarks}]

```

We let METAPOST do the calculations and draw the collating marks.

```

54 \protect
55 \stopmodule
56 \doifnotmode{demo}{\endinput}

```

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Example

```

\usemodule[collatingmarks][Collatingmarks=yes]
\setuppapersize[A5][A2]
\setuplayout[location=middle,marking=on]
\setuppagenumbering[alternative=doublesided]
\setuparranging[2*4]

\setupMPvariables
  [pages=8, % pages per sheet of paper doublesided
   sheets=1, % sheets of paper used per section
   horpageshift=0mm] % used for correction if horizontal page-shifting is used while
imposition is active

\starttext
  \dorecurse
    {10}
    {\startsection[title={Text \recurselevel}]
      \input tufte \par
      \startsubject[title={Ward}]
      \input ward\par
      \stopsubject
      \stopsection%
    }
  \stoptext

57 \usemodule[collatingmarks][Collatingmarks=yes]
58 \setuppapersize[A5][A2]
59 \setuplayout[location=middle,marking=on]
60 \setuppagenumbering[alternative=doublesided]
61 \setuparranging[2*4]

62 \setupMPvariables
63   [pages=8, % pages per sheet of paper doublesided
64    sheets=1, % sheets of paper used per section
65    horpageshift=0mm] % used for correction if horizontal page-shifting is used
66    while imposition is active

67 \starttext
68   \dorecurse
69     {10}
70     {\startsection[title={Text \recurselevel}]
71       \input tufte \par
72       \startsubject[title={Ward}]
73       \input ward\par
74       \stopsubject
75       \stopsection%
76     }
77 \stoptext

```

