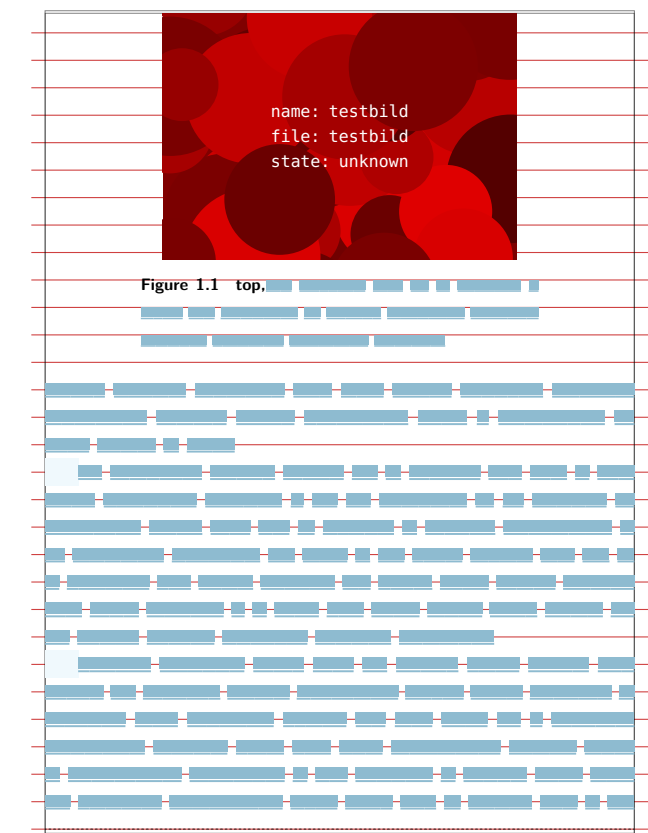


Regular old floats

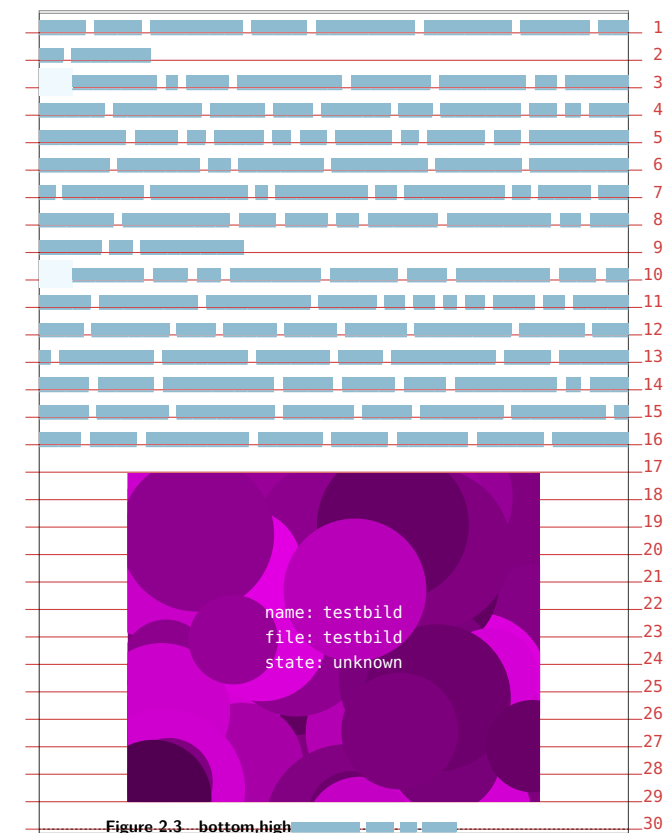
Without grids or columns, floats are usable.

location	works?
top	reliable
bottom	unreliable
left/right	reliable
margin/edge	reliable
page	reliable (also with high/low)

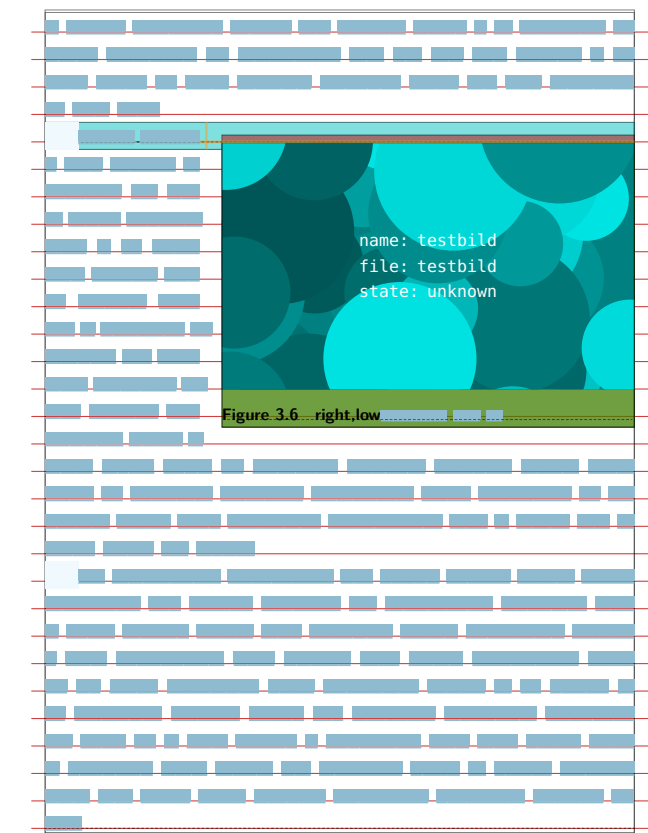
no grid 3 new columns



no grid 20 new columns




no grid 39 new columns



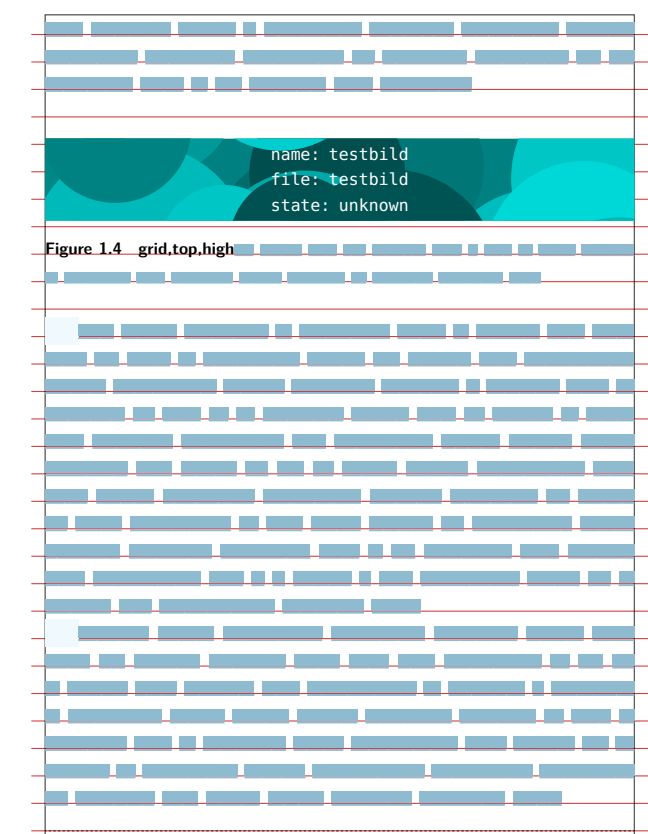
no grid 61 new columns



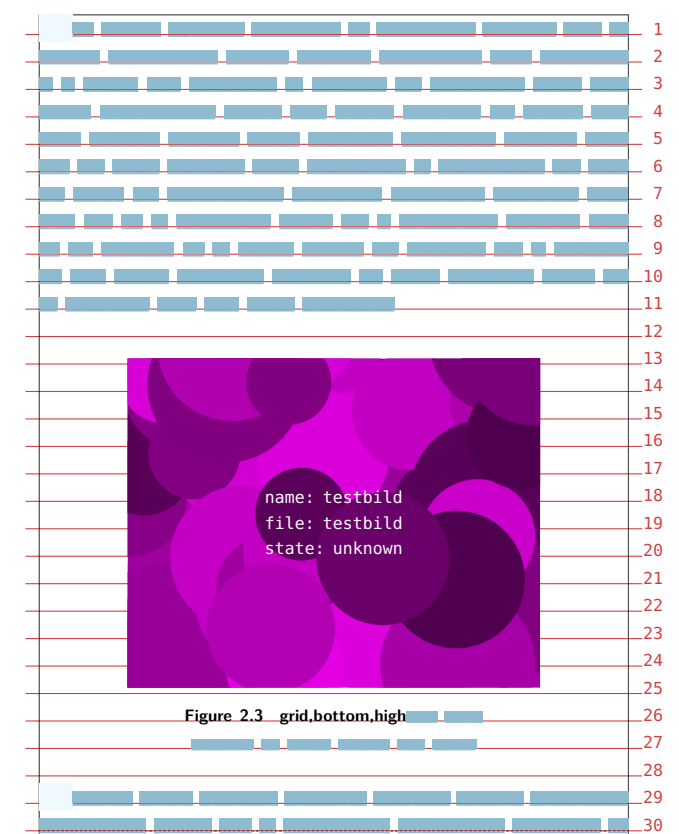
Floats in grid mode

- Most locations are working like without grid.
-  page placement doesn't work, sometimes top not on top.
- I didn't check the grid alignment. (Usually the captions are on grid, but not the images.)

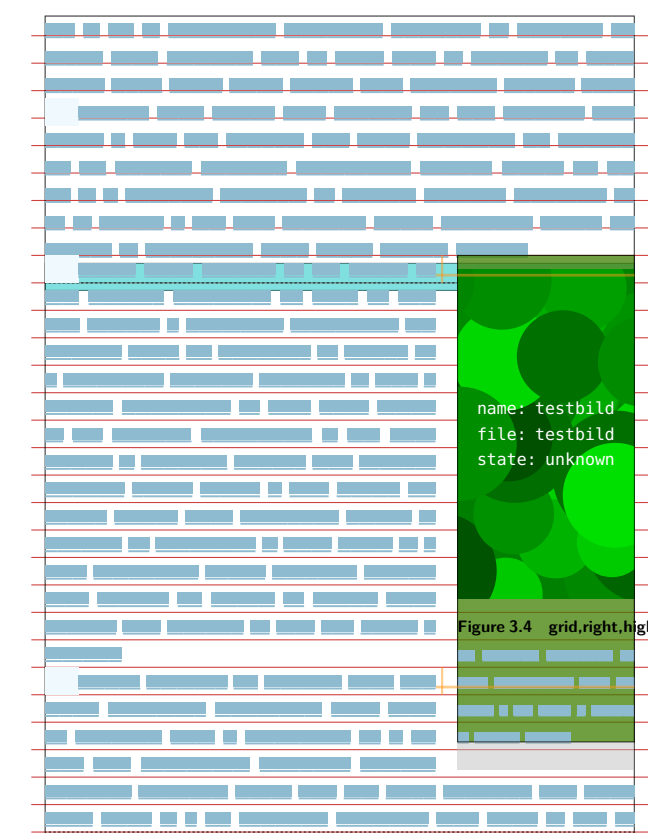
grid 8 new columns



grid 20 new columns



grid 36 new columns



grid 63 new columns



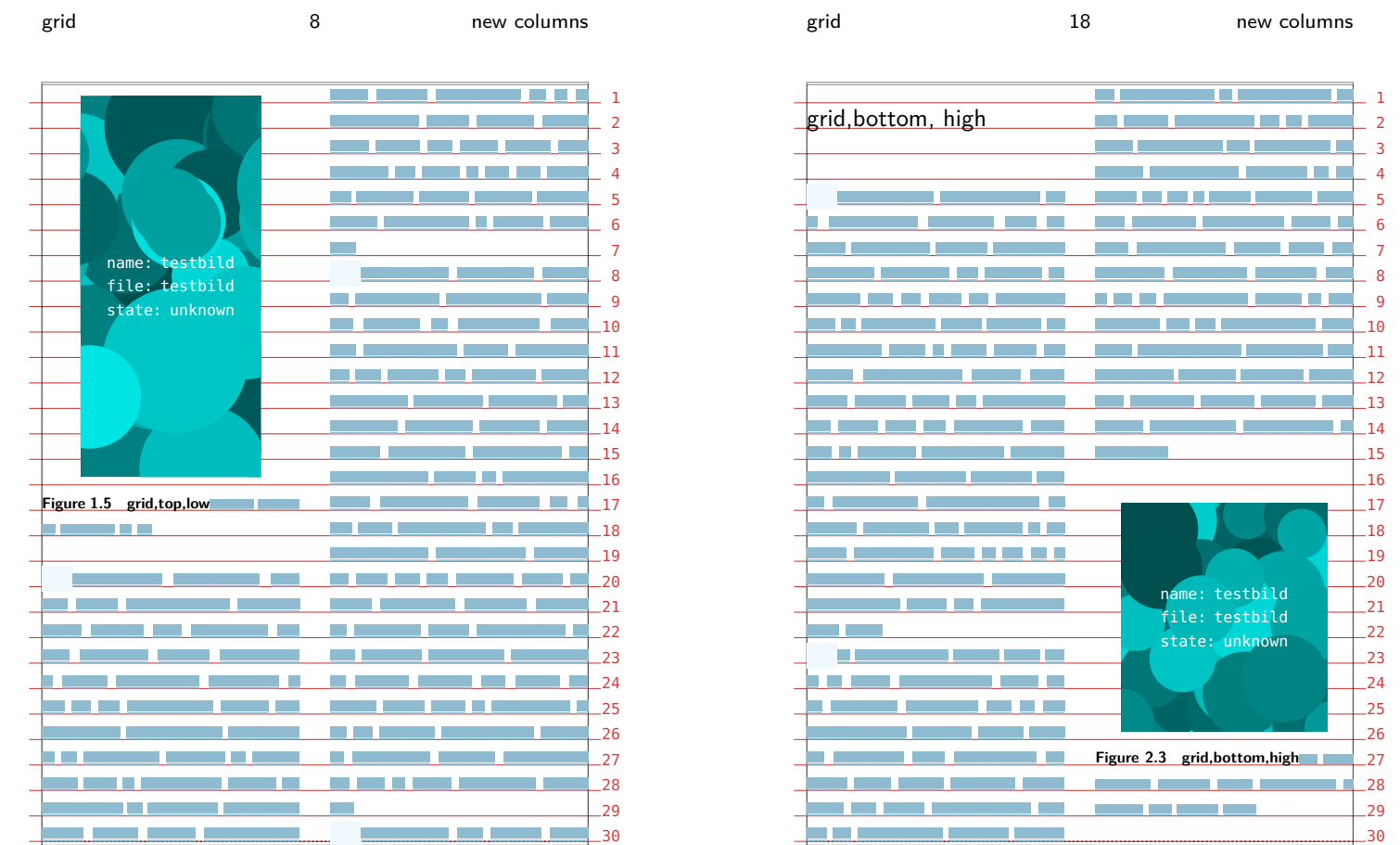
Floats in columns

New columns

- New columns are always in grid mode.
- Locations don't work (top sometimes does) – it's always like here. Page breaking is strange.

Old columns

- Old columns are gone.



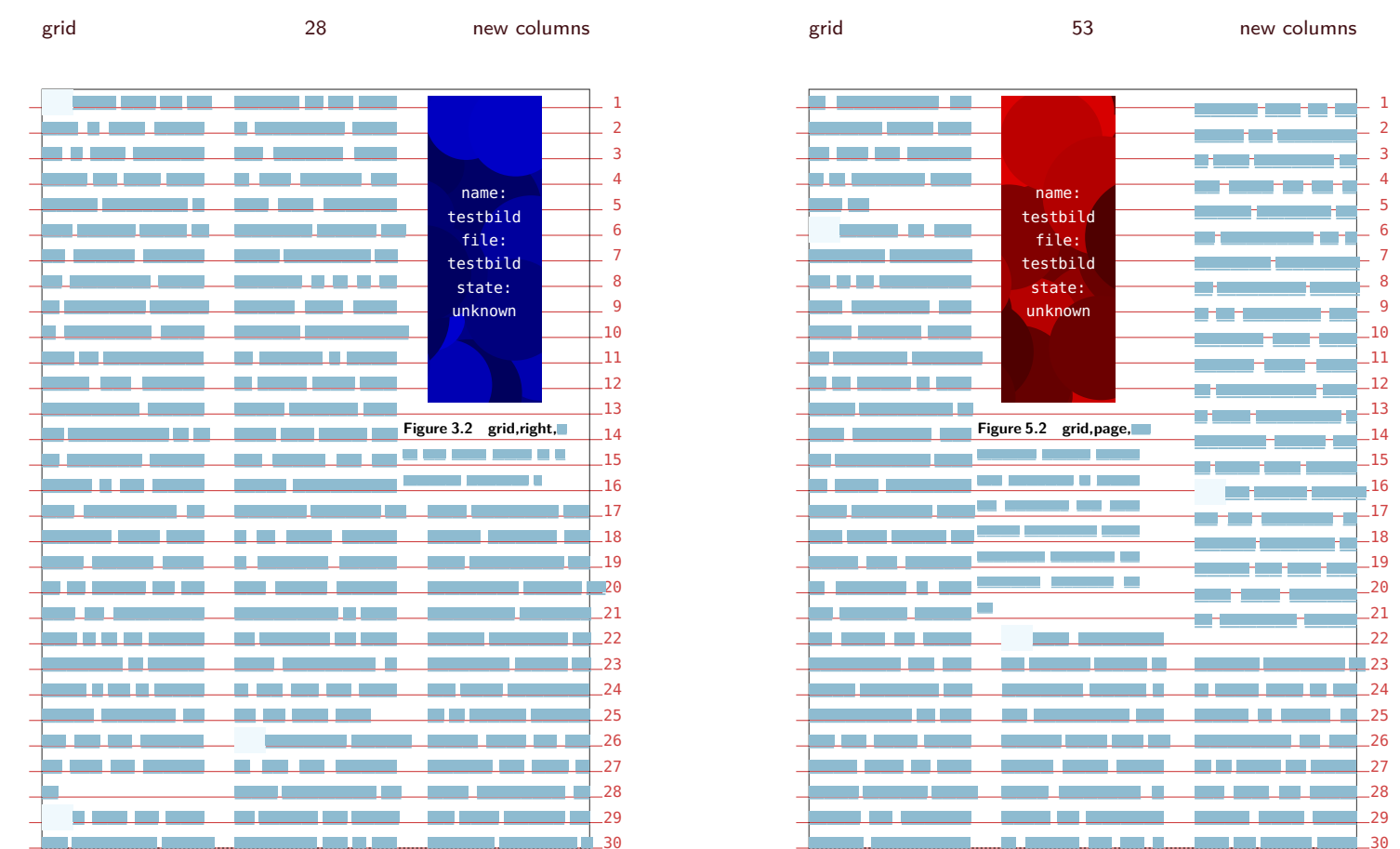
Floats in columnsets

New columnsets

- Grid mode is enforced.
- ⚠ ■ In new columnsets, float locations don't work, like in single-column grid mode.
- ⚠ ■ Floats appear left aligned in the column, but the caption is centered, but as wide as the column, i.e. there are collisions.

Old columnsets

- Old columnsets are also gone



Marginal floats

Images in margins.

Images wider than margin (text flow?)

Images with full text width plus margin

Use `\starthanging`?

Floats with bleed

```
\placefigure[top,leftpage,high][fig:ref]{Caption}{%  
  \offset[  
    topoffset=\dimexpr-\topspace -\headerheight -\Bleed  
-1mm\relax,  
    leftoffset=-\Bleed]{%  
  \externalfigure[myImage][width=\dimexpr\pagewidth +  
\Bleed\relax]  
  }%  
}%
```

Not shown: Image size is calculated, image is clipped to fit.

⚠ Beware: Imposition (arranging) cuts the bleed!

Full page images

```
\definemakeup[fullpage] [  
  page=no,  
  doublesided=no,  
  headerstate=empty,  
  footerstate=empty,  
  pagestate=start,  
]  
  
\startpostponing[pagelength]  
  \startfullpagemakeup  
    \setlayer[myLayer][x=-\Bleed,y=-\Bleed]{%  
      \clip[  
        hoffset=0mm, voffset=0mm,  
        width=\maxWidth, % page width + bleed  
        height=\maxHeight, % page height + 2*bleed  
      ]{%  
        \externalfigure[myImage][height=\maxHeight]% or width=\maxWidth  
      }%  
    }  
  \stopfullpagemakeup  
\stoppostponing
```


Double page images

divide et impera...

Similar to single page images, but picture is clipped in two halves and placed separately in two single fullpage makeups, but in one postponing.

Captions within images

- `\setupcaption` has mighty options for captions of floats.
- Captions in full page images use `\setlayer`.
- e.g. shadow style: white text on shadow (use underline shadow instead of box)
- e.g. cutout style: white box (lines?) at image rim

Goals

- Pictures sit on grid lines and end at x-height.
- Pictures that are bigger than the text area but not full page size also must sit on the grid and might extend into the bleed.
- How to fit to grid/layout?
 - width is usually the leading measure
 - define fixed width or set of possible widths (layout grid)
 - define target resolution (default e.g. 150 dpi, min. 200 dpi for printing)
 - define a stretching tolerance
 - define a clipping side
 - calculate max size according to target resolution
 - warn if image resolution is too low (debug mode: typeset size/res information on image)
 - calculate max lines according to width
 - downsample big images according to target resolution
- Captions within pictures, in margin or in neighbour column...
- If captions use the same line height as the body text, they adhere to the grid. If they use a different line height, only the distance to the picture needs to be constant.

