

# A Calligraphy Grid in ConTeXt/LMTX

This project is a generator of grids for medieval calligraphy in [ConTeXt/LMTX](#) and [MetaPost](#).

## Files included

- Main module:  
tex/context/third/pauta/t-pauta.mkx1
- Example file:  
doc/context/third/pauta/pauta-example.tex (also in pdf)
- A copy of this file in ConTeXt format:  
doc/context/third/pauta/pauta-example.tex (also in pdf)
- Environment file for the examples (not needed for Pauta to work):  
doc/context/third/pauta/env-pauta.tex
- This README.md file, and a pandoc generated ConTeXt version at doc/context/third/pauta/README.tex. It gets regenerated by the build.lua script on each run using pandoc.
- The build script build.lua, that takes care of generating the tex version of the README file and all the pdfs.

## Use

1. Clone this repository: `git clone https://github.com/conradolandia/pauta.git`, and `cd` inside it.
2. Copy the `doc` and `tex` folders to your ConTeXt tree and rebuild your database with `context --generate`. You can find more details about the process [on the ConTeXt wiki](#). Alternatively, call `context` with the `--path` flag, and provide it with the path of this folder, i.e: `context --path=/home/user/pauta`. Alternatively still, simply place `t-pauta.mkx1` on the same directory as the file importing it.
3. Invoke the `\Pauta` macro as many times as you want pages. Each invocation can have a different configuration. Each invocation will create one single page.
4. The data about the hand<sup>1</sup> is autogenerated by the module and set into the header or the footer, following the user configuration.
5. **Warning:** This module takes over the top and bottom typesetting areas<sup>2</sup>, and does not reset them properly yet. So if your document includes other content on those areas you will need to reset again to your liking by manually invoking `\setuptoptexts/\setupbottomtexts`. This will be hopefully improved in the future.

## Generating the example file

Review and run the lua script `build.lua`. If you don't have a standalone lua interpreter, you can run it with `luametatex` like so:

```
luametatex --luaonly build.lua
```

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<sup>1</sup> This is a way of saying the *font* in fancy calligraphic terms.

<sup>2</sup> Check out the [layout](#) article in the wiki for more information about ConTeXt typesetting areas.

You can also adapt it and use to build your own projects, `build.lua` lives in its own [repository](#).

## Configuration Parameters

All parameters are optional. Defaults are as follows:

```
\Pauta[
  hand=, % Hand name. If not defined, will not show info on the right of the header / footer
  handInfo=, % Some extra info for the hand. If not defined, will not show info on the right of the header /
  footer
  infoPosition=header, % Where to show the extra info (header | footer)
  infoLeft={\setup{pauta:content:leftmark}}, % If defined, will override autogenerated hand info on the left
  of the footer / header
  infoRight={\setup{pauta:content:rightmark}}, % If defined, will override autogenerated hand info on the right
  of the footer / header
  displayNibs=false, % Show nib-width marks (true | false)
  displayAngleMarks=false, % Display dotted guides for the nib angle (true | false)
  nibWidth=3mm, % Pen nib width (must include units, or it will default to big points)
  nibAngle=35, % Nib working angle in degrees
  ascenders=3, % Number of ascender lines (in nib widths)
  xHeight=4, % Number of x-height lines (in nib widths)
  descenders=3, % Number of descending lines (in nib widths)
  adjustment=0, % Sometimes it's necessary to adjust the line height if is longer than TextHeight, still not
  sure why it happens but it happens... a value of 1 or 2 should solve it.
  mainColor={s=.4}, % Main color (lines that separate sections)
  secondaryColor={s=.6}, % Secondary color (lines separated by a nib width and dotted angle lines)
  tertiaryColor={s=.8}, % Tertiary color (nib width marks on the left margin)
]
```

## Code Examples

### Example 1: Basic Usage

```
\usemodule[pauta]

\startdocument
\Pauta[
  hand={Carolingian},
  handInfo={Tours school, VIII\high{th} century},
  infoPosition=header,
  displayNibs=true,
  displayAngleMarks=true,
  nibWidth=3mm,
  ascenders=2,
  xHeight=3,
  descenders=2,
  adjustment=0,
  mainColor={s=.6},
  secondaryColor={s=.8},
  tertiaryColor={s=.8},
]
\stopdocument
```

## Example 2: Multiple Pauta Instances

```
\usemodule[pauta]

\startdocument
\Pauta[
  hand={Carolingian},
  handInfo={Tours school, VIII\high{th} century},
  infoPosition=header,
  displayNibs=true,
  displayAngleMarks=true,
  nibWidth=3mm,
  ascenders=2,
  xHeight=3,
  descenders=2,
  adjustment=0,
  mainColor={s=.5},
  secondaryColor={s=.6},
  tertiaryColor={s=.7},
]

% Overriding the header / footer info:

\Pauta[
  infoLeft={An exercise in Visigothic script},
  infoRight={from an Spanish manuscript, VII\high{th} century},
  infoPosition=footer,
  displayNibs=true,
  displayAngleMarks=false,
  nibWidth=2mm,
  ascenders=4,
  xHeight=3,
  descenders=4,
  adjustment=1,
  mainColor={s=.3},
  secondaryColor={s=.4},
  tertiaryColor={s=.5},
]
\stopdocument
```