TEX in church

More adventures

Paulo Cereda
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Gruppo Utilizzatori Italiani di TEX
Introduction

• Using \TeX and friends beyond the academic scope is not unusual
• The literature is, however, a bit sparse when covering such scenarios
Earlier this year...


- \text{\textregistered}X for producing material for masses and church-related activities
- Two topics were covered: songsheets and song booklets
Design and content are not dissociated when reading a book!

Book of an
spiritual nature

Text          Visual aspects
↓            ↓
Food for the mind   Food for the heart
Book projects

- Attention to paper quality, cover artwork and typographical elements
- A good book project offers a very positive and pleasant experience
- Authoritative impact: mind, heart and soul are invited to harmony
My first project in 2015

- Typeset a small songbook for our parish, with a circulation of 200 copies
- I had to design everything from ground up, from cover to internal elements
My first project in 2015

- 400 songs included in the book without going over 100 pages total
- Text had to be readable by people in a comprehensive age range
- I used memoir for class and multicol and tcolorbox for packages
My first project in 2015

- Inclusion of \texttt{ls} alongside with \texttt{scshape}
- Words of the Consecration in the Eucharistic Prayers

\begin{verbatim}
1 \texttt{ls}\{\texttt{scshape} Hoc est enim
2 \texttt{scshape} Corpus meum.\}
\end{verbatim}
My own songbook in 2018

- 900 songs included in 160 pages total (no space constraints)
- I used `memoir` for class and `multicol` and `fontspec` for packages
- My first project using `XeLaTeX` and system fonts (Karol and Myriad Pro)
My own songbook in 2018

- I used `imakeidx` for song indexing
- Songs had to be referenced by their numbers
My own songbook in 2018

\patchcmd{\@wrindex}{\thepage}{\thesongscounter}{}}{}%
\AtBeginDocument{%
  \patchcmd{\imki@putindex}{\immediate}{\ifimki@disableautomatic\else\immediate\fi}{}}%{
  \patchcmd{\imki@putindex}{\endcsname}{\endcsname\fi}{}}{}}
Another songbook in 2019

- Songsheets from the Taizé community compiled into a songbook
- I used **memoir** for class and **multicol** and **fontspec** for packages
- Songsheets were included as images (I had to calculate box widths)
• Decisions were result of years of experimentation
• A4 was always the norm regarding paper size
• Uncomfortable and clumsy to hold during masses
• The larger the paper, the quicker it would damage
• I decided to try A5 for a change: people were reluctant!
• There is a lot of potential on using A5 as paper size
• Saving trees: I could print two A5 pages in one A4 page
• The \texttt{pdfpages} package provides support for booklets
• I could print and fold A4 sheets without the need of cutting

\begin{verbatim}
1 \includepdf[pages={4,1,2,3},
nup=2x1]{booklet}
\end{verbatim}
• Fonts do play an important role during production
• Impression of credibility and assurance (or lack thereof)
• I still favour the use of serif fonts in printed material
How do I choose a font?
• I always need to know the target public
• Goal: enhance their reading experience
Case study: preparing an order of mass
• I need to ensure the text is readable
• Rounder and wider fonts (e.g., Bookman-based typefaces)
• Use of **microtype** for character protrusion and font expansion
• The church building does not provide natural light
• Font has to be spotted in a low light environment
• Rounder and wider fonts are readable at smaller sizes
Fonts

- Paper size and the area available for content
- Handling text alignment and hyphenation rules
- Balance between good typography and readability
• Discreet use of bold, italics and other styles
• The human eye is very receptive to differences
• Too much emphasis could distract the reader
Fonts

Ciao, mi chiamo OpenDyslexic!

- Created to increase readability for readers with dyslexia
- Letters have heavy weighted bottoms to indicate direction
- Unique shapes can prevent confusion (flipping and swapping)
• Developed explicitly for visually impaired people
• The font font adheres to several design criteria
• Good reading experience for the visually impaired

Ciao, mi chiamo Luciole!
I decided to experiment minimalist designs due to constraints.
Smaller titles and graphical elements unobtrusively disposed.
I also refrained myself from using too much colour (if any).
• The layout itself could benefit from the use of text columns
• Interesting approach for taking advantage of the space available
How many columns should I use?
• For smaller font sizes, three columns is a sensible approach
• For larger fonts or for certain scenarios, two columns is the norm
• It is very useful to prepare document proofs!
• Everything is put under scrutiny, from text to printing
• The feedback does not need to be of a technical nature
Columns are handled by the `multicol` package

Balanced columns

- Aesthetic
  - Human eye is keen on symmetry

- Strategical
  - Space can be used for additional content
• Roman Canon (or Prayer I) typeset with \LaTeX{} and Lilypond
• The \texttt{lyluatex} package manages the inclusion of musical scores

1 \texttt{lilypondfile{sheets/amen.ly}}
Roman Canon
• I write and typeset the monthly bulletin for the liturgy pastoral
• News, reports, recommendations, puzzles and recreational activities
• The material is typeset in A5 and distributed at the end of the masses
• I use the **soup** package for generating an alphabet soup
• A type of puzzle consisting of a grid of letters for word search

\begin{Alphabetsoup}
\hideinsoup{Փ}{Փ}{down}{G,U,I,T}
\hideinsoup{Փ}{Օ}{right}{I,T,A,L,I,A}
\hideinsoup{Փ}{՘}{upright}{C,A,R,L,A}
\end{Alphabetsoup}
A script of prayers for the Holy Hour before the Blessed Sacrament

The project had sections with songs and prayers arranged together

The `tcolorbox` package was used to generate all the song boxes
Holy Hour before the Blessed Sacrament

- The song box has a music note icon in the upper right corner.
- Done by exploiting the `overlay` key in the `tcolorbox` environment.

\begin{tcolorbox}
\newcommand{\musicnote}{\begin{scope}[
\shift={([xshift=-.5em, yshift=-.1em]frame.north east)}, scale=1 \] \node[ circle, fill=white, draw=black, inner sep=1pt ] {\includegraphics{note}}; \end{scope}}
\end{tcolorbox}
Activities and events for the Holy Week 2019

• Flyer for distribution at the end of the masses during Lent
• The activities of each day are grouped into tcolorbox boxes
• Each activity features an analog clock indicating the time slot
Activities and events for the Holy Week 2019

- Inclusion of a background image (simple pattern) for each group
- Opacity of such images should not compromise the text readability

```
\begin{tcbclipinterior}
\node[anchor=south] at ([yshift=-10pt]interior.south) {
\includegraphics[width=\tcb@width, keepaspectratio]{assets/bloom.png}};
\end{tcbclipinterior}
```
Remarks

- The presented materials do not contain any complex code at all
- Minimalist layouts inspired by good, existing typographical works

The ultimate goal

Contribute, through typesetting, to the complete fulfilment of a person’s relationship with God
A case study

• On October 2020 in Assisi, Pope Francis signed *Fratelli tutti*
• An encyclical letter, calling for more human fraternity and solidarity
• The complete text is freely available in the Vatican website for browsing
A case study

• The Holy See provides a PDF version of such encyclical letter
• We can infer that the file was automatically generated (PDF metadata)
• Other encyclicals from Pope Francis and his predecessors are available
La Santa Sede

LETTERA ENCICLICA
FRATELLI TUTTI
DEL SANTO PADRE
FRANCESCO
SULLA FRATERNITÀ
E L’AMICIZIA SOCIALE

A case study

Let us propose a minimalist layout!
A case study

- The original document uses sans serif fonts (Arial and Helvetica)
- I will rely on serif fonts instead and use just one typeface (Karol)

```latex
\usepackage{fontspec}
\usepackage{microtype}
\setmainfont[Ligatures=TeX]{Karol}
```
A case study

- I removed any colour from the document (black and white approach)
- The Papal Insignia was desaturated to match the document style
A case study

• The original document margins were too narrow, so I made them wider
• I reduced the font size, kept the default line spacing and text alignment

\documentclass[\texttt{a4paper, 12pt, article}]\{\texttt{memoir}\}
A case study

- Excerpts of text in all capitals were rewritten to match sentence case
- Added some occurrences of small capitals as to emphasise key words
- Bold styles were removed, italics and emphasis were kept to a minimum

1 \textsc{La Santa Sede}
A case study

- The separator rule in the header was made thinner
- A small ornament glyph was added in the centre

\begin{verbatim}
\newcommand{\ornamentline}{%\parindent=\up\hrulefill\hspace{0.2cm}\raisebox{-1.5ex}{\decoone}\hspace{0.2cm}\hrulefill}\
\end{verbatim}
A case study

- An initial was included in the first paragraph of the encyclical letter
- I used the `lettrine` package with Kramer Regular as decorative font

```latex
\lettrine[nindent=2pt]{F}{ratelli Tutti}\autocite{ref:1}, scriveva...
```
A case study

- Each paragraph of the encyclical letter is explicitly numbered
- I included the corresponding number as a discreet marginal note
- A silcrow prefixed each number as to indicate the reference mark

\begin{verbatim}
1 \newcommand{\parmark}{%\marginpar{\hspace{2em}S#1}}
\end{verbatim}
A case study

- The original citation style was replaced to look like footnotes
- The bibliography is printed at the end of the document, as usual

\begin{verbatim}
% Some suggestions...
\usepackage[style=verbose-ibid,
backend=bibtex]{biblatex}
\end{verbatim}
1. «Fratelli tutti», scrisse San Francesco d’Assisi, per rivolgersi a tutti i fratelli e le sorelle e prospettare loro una forma di vita dal sapore di Vangeli. Tra i suoi consigli voglio evidenziare uno, nel quale invita a un amore che va al di là delle barriere della geografia e dello spazio. Qui egli dichiara beato colui che ama l’altro «quando fosse lontano da lui, quanto se fosse accanto a lui» Con queste poche e semplici parole ha spiegato l’essenziale di una fraternità aperta, che permette di riconoscere, apprezzare e amare ogni persona al di là della vicinanza fisica, al di là del luogo del mondo dove è nata o dove abita.
Remarks

- The proposed minimalist design adds a layer of fine crafting
- Subjective encouragement and motivation for potential readers
• A good design helps people focus on the actual message
• Old, ubiquitous maxim in design: good typography is invisible
Final remarks

Typography is art

Good design

Coherent

Logical and consistent

Cohesive

United and working together
Final remarks

• Good typography is indeed invisible and silent
• However, it is by no means imperceptible
• Noticing it brings great joy, gratification
Good typography is like red wine...
Vino rosso fa buon sangue!
Pace e bene!

Pax et bonum!

Paulo Cereda