## $\sl =$

 $\label{long_macro:-} $$ \operatorname{subsubsection}_{3}_{z@}_{-3.25ex}_{-1ex} \operatorname{-.2ex}_{0.5ex \@plus .2ex}_{sffamily \normalsize \mbox{mdseries}} $$$ 

# Paris-thesis packages bundle

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#### Abstract

The Paristhesis bundle is a kind of YATHT<sup>1</sup>, that adds a new element to the almost countless variants that can be found on CTAN or elsewhere on the Internet<sup>2</sup>. Unlike many alternative solutions, it deeply rely on the standard book class and neither KOMA-script nor MEMOIR. It provides a number of tools that either approximate French typography or facilitate specific tasks for French doctoral theses, taking into account that most French universities do not provide binding rules on the format of my thesis, with the notable exception of cover pages

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# Introduction

As it contains a large set of packages, that mostly work only with the standard book class, this bundle would deserve the creation of a class, that could be done in the future if users request it. However, it seemed preferable to the author to keep it in the form of separate packages in order to preserve the modularity. In this way, the (eight) packages, which have been carefully made compatible as a whole, can be loaded or not depending on the end user's choice. They are also assumed to work whether or not one chooses to use hyperref and/or babel<sup>3</sup>

<sup>&</sup>lt;sup>1</sup>YATHT=Yet another (PhD) thesis template

<sup>&</sup>lt;sup>2</sup>Not to mention all the templates, most of them obsolete, that are lying around in the laboratories

<sup>&</sup>lt;sup>3</sup>Only the french and english options have been tested.

# 1 The five packages preamb-\*\*\*

All of theses packages heavily rely on the packages etoolbox and kvoptions.

The description below lists only the packages directly loaded, but not their dependencies.

The star  $\star$  denotes packages conditionally loaded depending on options selected.

The means that the corresponding setting can be overridden after package loading.

# 1.1 Package preamb-util

This package loads many utilities packages, and is essential for the others to function properly.

## Packages loaded

The list of packages loaded by preamb-util is shown on table 1.

Table 1: Packages loaded by preamb-util

Name	Use
- etoolbox	% Many advanced functions using ε-tex
- kvoptions	% Handle key=value options
- datetime2	% Hour and time formating and computation
- eso-pic	% Place elements in the background at arbitrary position
- afterpage	% Place items/command at the top of the next page
- silence	% Suppress some packages warnings
- xstring	% String parsing and manipulation
- afterpackage	% Load a package when another is loaded
- ltxcmds	% Provide latex 2 ckernel commands
- pdftexcmds	% Provide pdftex primitives
- setspace	$\%$ If you need \onehalfspacing or \doublespacing

## **Options**

None

## 1.2 Package preamb-graph

This package aims to ease the placement of graphics and their captions. If does not load any part of PGF in order to not overload the compilation for users which do not use them.

## Packages loaded

The list of packages loaded by preamb-graph is shown on table 2.

#### **Options**

floatbarrier: *empty* or section or any option recognized by placeins.

Default: empty (\FloatBarrier is available but not automatically used).

Name	$\mathbf{U}\mathbf{se}$
- graphicx	% The swiss-army knife for graphics inclusion
- xcolor	% Color definitions with options svgnames, table, hyperref, pdftex
- pdfpages	% Inclusion of selected pages of another PDF file
- subcaption	% Load caption and define \subcaption & environment subfigure

% Defines the \FloatBarrier command.

Table 2: Packages loaded by preamb-graph

#### Settings

- placeins  $\star$ 

- Defines French figure caption with \captionsetup. @
- Increase the \\*\*\*fraction ratios to ease the flat placement. ∅

## 1.3 Package preamb-math

## Packages loaded

Name	Use
$-$ mathtools $\star$	% loads amsmath
- amssymb, bm, bbm	$\%$ loads ${\tt amsfonts}$ with bold math and blackboard
- icomma	% comma as decimal separator (for french)
- upgreek	% greek upright letters for $\mu \mathrm{m}$ and $\beta\mathrm{-decay})$

## Options

ams:	Loads amsmath package (via mathtools).	(default: false)
showonlyrefs:	mathtools's non-numbering of non-referenced equations.	(default: false)
slantedgreekcaps:	Slant the Greek capital letters <sup>4</sup> .	(default: false)

## 1.4 Package preamb-titles

The options in this package control the formating of sectionning commands, the main goal being to set titles to sffamily (sasn-serif font).

## Packages loaded

The following packages are loaded only if the corresponding option is set.

- Name	% Use
- titlesec ★	% Titles customization.
$-$ minitoc $\star$	% Provides small table of contents for each chapter.
- slantsc	% Slanted small caps in running header.

<sup>&</sup>lt;sup>4</sup>The slanted version is like  $\backslash Gamma \rightarrow \Gamma$  but the upright version remains available with  $\backslash varGamma \rightarrow \Gamma$ .

#### **Options**

titles: To alter the titles with the package titlesec's \titleformat or with

etoolbox's \patchcmd.

(default: patchcmd)

- empty or or option not set : does nothing

- titlesec Modify titles by using titlesec package - patchcmd Modify titles by using patchcmd package

romanchap: Numbering of chapters with roman uppercase (default: false)
alphsubsub: Numbering of subsubsections with a), b)... (default: false)
minitoc: Loads package and prepare a minitoc per chapters (default: false)

headings: To alter the running headings.

(default: empty)

- empty or option not set : does nothing.

- small keeps the uppercased version bit reduces the font size.

- slansc remove uppercase and use slanted small caps.

- smallsfbold remove uppercase and use small bold sans-serif.

### Settings

• Set \pagestyle to headings (the default for the standard book class).

- With minitoc Assumes that counter \tocdepth has been set before package loading and set minitoc's depth to \tocdepth+2.
- Set the numbering by chapter for equation, figure, table.

## 1.5 Package preamb-work

This package loads or implement several tools that can be useful during the time you are writing your thesis. It must be commented out for the final version, or use the final option of document class to disable it's features (including not loading any package).

## Packages loaded

Name	Use	
- lipsum, blintext ★ % generate dummy text		
- showkeys	$\%$ display in matgin the (normally hidden) \label keys	

## **Options**

None

#### Settings

- Set blindtext options to get an extended version when using its command \Blinddocument.
- Automatically append the day an compilation time in the bottom margin of each even (left) page.
- Setup **showkeys** to show only \labels and not \refs nor \cites. @ Example:

Version compilée le 2021-05-27, à 12:21:21

# 2 Package citebackref

This very small package helps to include back references in the bibliography. It handles the different case wether or not hyperref and/or babel is used. It must be loaded after babel and before hyperref. It's output is in the babel's default language (default to Englisf) and features hyperlinks if relevant.

#### Packabe loaded

- Name	% Use
- backref ★	% Handle back references if hyperref not laoded
- showkeys	$\%$ display in matgin the (normally hidden) \label keys

## Options

None

# 3 Package versionswitch

#### 3.1 Context and aim

The French regulation requires that thesis are presented in two versions:

- The so-called "diffusion" version, which must be strictly compliant with the copyright rules and therefore free of any third-party content for which the explicit authorization of the authors and the rights holder has not been obtained
- The so-called "archival" (en French «archivage»), which may contain such elements, but are necessarily restricted for distribution and reproduction

As the maintenance of two different versions of the same document, differing only by the fact that one is expurgated of some elements (mostly figures), is a tedious and error-prone task, it is interesting to have only one source file and to be able to switch easily from one mode to the other.

## 3.2 Use

This simplification is the purpose of the **versionswitch** package, which defines a dedicated environment, named **copyrighted**, in which the elements to be deleted must be enclosed.

- When the documents is compiled normally, or with the \documentclass's options archiv one get the complete "archival" version.
- Oppositely, if one uses the option diffus or diffusion, the content of each copyrighted is replaced by a box of exactly the same size, ensuring that the surrounding part of the document is typeset in exactly the same way.

The option diffusion is somehow similar to the draft option, with important differences:

1. The overfull mark is not printed

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- 2. Only some specific figures (or texts) are replaced by a box.
- 3. This box not only contains the name of the file but also the full bibliographic reference, including an hyper-link to the original work, if **hyperref** is loaded.

The bibliographic reference can be provided in two versions of the **copyrighted** environment. **First version** 

```
\begin{copyrighted} [option] {bibkey}
\begin{figure} [tbph]
...
\end{figure}
\end{copyrighted}
```

where bibkey is the BibTeX key of the corresponding reference (the corresponding \cite is also added in the figure \caption). This reference (the \bibitem) is extracted from the reference list as provided by BibTeX, by the mean of the bibentry package. This bibentry package is tightly linked with the natbib package, by the same author, which is very convenient to improve the formating of the \cite in the text. Therefore, it is necessary to load the natbib package prior to the versionswitch package. The bibentry it self is loaded by versionswitch, and should in no way be loaded independently, as it would clash with hyperref or the citebackref package.

The optional argumentoption can be set to option in order to locally emulate the "diffusion" mode.

#### Second version

```
\begin{copyrighted} [option] {bibkey} [fullbibref]
\begin{figure} [tbph]
...
\end{figure}
\end{copyrighted}
```

In this version the **bibkey** is used only to provide the link to the bibliography, but the **bibentry** is not used. The second optional argument **fullbibref** must then provide the formatted content that must be put into the box.

## 3.3 Examples

The code of several examples is provided in the file app-versionswitch.tex included in the template.

# 4 Package thcover

This packages creates front- and back- cover pahes (1 & 4) according to the style prescribed by the university<sup>5</sup>. It also embeds the (user provided) metadata in the PDF file and can optionally create a PDF/A file.

Please refer to its own documentation.

<sup>&</sup>lt;sup>5</sup>At time of writing (2021-05-27) the cover pages are implemented for the main universities in Paris Sorbonne Université (SU), Paris Sciences et Lettres (PSL), Université de Pais (UP) and Université Paris-Saclay (UPSaclay). Hence the name of the bundle. It's extension would be rather straightforward

# A Questions fréquentes

- L'option french de babel change les labels de itemize de en pour rededier à cela on dispose de trois méthodes au choix :
  - 1. Ajouter dans le *préambule* : \frenchsetup{ItemLabels=\textbullet}
  - 2. Ajouter dans le préambule : \frenchsetup{StandardItemLabels=true}
  - 3. Charger le paquet enumitem et ajouter dans le *préambule*, par exemple, \setlist[itemize,1]{label=\textbullet}. Noter que cette option est plus puissante car on peut aussi définir le label pour chaque liste.
- Cette page et les précédentes sont numérotées en chiffres romains. Pour changer cela mettre juste après \frontmatter: \renewcommand\thepage{\arabic{page}}.
- A la première page de \mainmatter, la numérotation recommence à 1. Pour changer cela mettre juste avant \mainmatter, \\renewcommand\*\pagenumbering[1]{}.
- Par défaut la table des matières et la bibliographie (et les \listof<something> et l'index éventuels) ne figurent pas dans la toc. Pour changer cela, le plus simple et de charger le paquet tocbibind (avec des options éventuelles pour exclure certains contenus) mais des méthodes options plus sophistiquées sont aussi disponibles, avec \addcontentsline (voir la source).