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CUSTOMIZING CLASSICTHESIS WITH THE ARSCCLASSICA PACKAGE



USER MANUAL

Italian T_EX and L^AT_EX User Group

<http://www.guitex.org/>

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The titlepage reproduces an engraving of Maurits Cornelis Escher, titled *Plane Filling with Birds* (the picture is obtained from <http://www.mcescher.com/>).

ABSTRACT

The package changes some typographical aspects of the ClassicThesis style, by André Miede. It allows to reproduce the look of the guide *The art of writing with L^AT_EX* (in Italian) [Pantieri and Gordini, 2012]. The hint for the original modification of ClassicThesis was gave to me by Daniel Gottschlag. The package was written for the Italian T_EX and L^AT_EX User Group (<http://www.guit.sssup.it/>).

SOMMARIO

Il pacchetto modifica alcuni aspetti tipografici dello stile ClassicThesis, di André Miede. Permette di riprodurre la veste grafica della guida *L'arte di scrivere con L^AT_EX* [Pantieri e Gordini, 2012]. Lo spunto per l'originale rielaborazione di ClassicThesis mi è stato offerto da Daniel Gottschlag. Il pacchetto è stato scritto per il Gruppo Utilizzatori Italiani di T_EX e L^AT_EX (<http://www.guit.sssup.it/>).

ACKNOWLEDGEMENTS

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Finally, thanks to André Miede, for his wonderful ClassicThesis style, and to Daniel Gottschlag, who has given to me the hint for this original reworking.

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1 | FUNDAMENTALS

This chapter introduces the (truly simple) basic notions of ArsClassica and presents its fundamental ideas and peculiarities.

1.1 INTRODUCTION

The ArsClassica package changes some typographical aspects of the ClassicThesis style, by André Miede [[Miede, 2011](#); [Pantieri, 2011](#)]. It allows to reproduce the layout of my guide *The art of writing with L^AT_EX* [[Pantieri and Gordini, 2012](#)] (in Italian) and of this document. The hint for this original reworking of ClassicThesis was gave to me by Daniel Gottschlag.

1.2 USE OF THE PACKAGE

The package is shaped for being executed on a *complete* installation of MiK_TEX or T_EX Live, and uses font freely available.

The installation of ArsClassica is very simple. You can download the `arsclassica.zip` file from [CTAN](#); then you will decompress it and install `arsclassica.sty` in the usual way.

The package works with the KOMA-Script classes (`scrreprt`, `scrbook` and `scrartcl`) and requires the `classicthesis` package, *updated to the last version available (the 4.0)*; it must be loaded *after* it. It can be loaded simply by

```
\documentclass[⟨...⟩]{scrreprt} % or scrbook or scrartcl

\usepackage[⟨...⟩]{classicthesis}
\usepackage{arsclassica}

\begin{document}
...
\end{document}
```

For example, this document has been obtained with the following code:

```
\documentclass[10pt,a4paper,twoside,openright,titlepage,fleqn,%
    headinclude,,footinclude,BCOR5mm,%
    numbers=noenddot,cleardoublepage=empty,%
    tablecaptionabove]{scrreprt}
```

```

\usepackage{\dots}
\usepackage[eulerchapternumbers,subfig,beramono,%
            eulermath,pdfspacing]{classicthesis}
\usepackage{arsclassica}

\begin{document}
...
\end{document}

```

It is recommended, but not compulsory, to use the options `beramono`, `eulerchapternumbers` and `eulermath` together with `ArsClassica`.

1.3 THE STYLE

The typographical style obtained with `ArsClassica` differs from `ClassicThesis` for the following aspects:

- use of Iwona font, by Janusz M. Nowacki, for the titles of the sectioning units of the document (chapters, sections, subsections, sub-subsections, paragraphs and subparagraphs), for the labels of description lists, for the headlines and the label of the captions (`ClassicThesis` does not use any font sans serif);
- customized chapter numbers;
- semi-transparent headlines; the headlines are separated from the page number by a small rule;
- captions with labels in boldface (`ClassicThesis` does not use boldface fonts);
- itemize lists with semi-transparent labels.

The `ArsClassica` package is conceived to provide to the user a ready-to-use typographical style: therefore it has no loading option and it is *not* configurable or customizable in any way. If you change the previous settings, you will risk to destroy the equilibrium of the style, so it is *highly recommended* to keep them unchanged.

One of the principles of \LaTeX is that it allows the author to take no interest in the typographical questions, permitting him to focus only the structure and the contents of the document. This fact should always be taken in consideration: using a style written from others, the user accepts all the typographical settings chosen for him from the author of the style, and he is not forced to study typography to fix the layout of his publications. This is the case of `ArsClassica` too: if you change its settings, you will contradict this philosophy and, consequently, you must study (a lot of) typography to obtain acceptable results.



(a) Asia personas duo.



(b) Pan ma signo.



(c) Methodicamente o uno.



(d) Titulo debitas.

Figure 1: Tu duo titulo debitas latente.

The style obtained with *ArsClassica* is *not* therefore configurable or customizable. The typographical style is something of very personal: if you like the package and find attractive the idea to take no interest in the problem of the style definition, then you will use *ArsClassica* with satisfaction; otherwise, if you have different needs or you are not satisfied with the layout of the package, then you should try other classes or packages, even building your own style.

1.4 NEW COMMANDS

The package offers the `\ctLaTeX`, `\ctLaTeXe` and `\ctTeX` commands, which allow to reproduce respectively the \LaTeX , $\text{\LaTeX}_{2\epsilon}$ and \TeX logos correctly written in Iwona.

1.5 EXAMPLES

Note: The content of this chapter is just some dummy text. It is not a real language.

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetur id, vulputate a, magna. Donec vehicula augue eu neque.

A subsection

Nam dui ligula, fringilla a, euismod sodales, sollicitudin vel, wisi. Morbi auctor lorem non justo. Nam lacus libero, pretium at, lobortis vitae, ultricies et, tellus. Donec aliquet, tortor sed accumsan bibendum, erat ligula aliquet magna, vitae ornare odio metus a mi. Morbi ac orci et nisl hendrerit mollis. Suspendisse ut massa. Cras nec ante. Pellentesque a nulla. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Aliquam tincidunt urna. Nulla ullamcorper vestibulum turpis. Pellentesque cursus luctus mauris.

A sub-subsection

Nulla malesuada porttitor diam. Donec felis erat, congue non, volutpat at, tincidunt tristique, libero. Vivamus viverra fermentum felis. Donec nonummy pellentesque ante. Phasellus adipiscing semper elit. Proin fermentum massa ac quam. Sed diam turpis, molestie vitae, placerat a, molestie nec, leo. Maecenas lacinia. Nam ipsum ligula, eleifend at, accumsan nec, suscipit a, ipsum. Morbi blandit ligula feugiat magna. Nunc eleifend consequat lorem. Sed lacinia nulla vitae enim. Pellentesque tincidunt purus vel magna. Integer non enim. Praesent euismod nunc eu purus. Donec bibendum quam in tellus. Nullam cursus pulvinar lectus. Donec et mi. Nam vulputate metus eu enim. Vestibulum pellentesque felis eu massa.

A PARAGRAPH Lorem ipsum dolor sit amet, consectetur adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetur id, vulputate a, magna.

Nam dui ligula, fringilla a, euismod sodales, sollicitudin vel, wisi. Morbi auctor lorem non justo. Nam lacus libero, pretium at, lobortis vitae, ultricies et, tellus. Donec aliquet, tortor sed accumsan bibendum, erat ligula aliquet magna, vitae ornare odio metus a mi. Morbi ac orci et nisl hendrerit mollis. Suspendisse ut massa. Cras nec ante. Pellentesque a nulla. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Aliquam tincidunt urna. Nulla ullamcorper vestibulum turpis. Pellentesque cursus luctus mauris.

MANE Lorem ipsum dolor sit amet, consectetur adipiscing elit.

TEKEL Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris.

FARES Nam arcu libero, nonummy eget, consectetur id, vulputate a, magna.

Table 1: Lorem ipsum dolor sit amet, consectetur adipiscing elit. Curabitur dictum gravida mauris.

p	$\neg p$
V	F
F	V

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetur id, vulputate a, magna. Donec vehicula augue eu neque. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Mauris ut leo. Cras viverra metus rhoncus sem. Nulla et lectus vestibulum urna fringilla ultrices. Phasellus eu tellus sit amet tortor gravida placerat. Integer sapien est, iaculis in, pretium quis, viverra ac, nunc. Praesent eget sem vel leo ultrices bibendum. Aenean faucibus. Morbi dolor nulla, malesuada eu, pulvinar at, mollis ac, nulla. Curabitur auctor semper nulla. Donec varius orci eget risus. Duis nibh mi, congue eu, accumsan eleifend, sagittis quis, diam. Duis eget orci sit amet orci dignissim rutrum.

2 | THE CODE

Announcement of the package and requirement for the necessary packages.

```
1 \NeedsTeXFormat{LaTeX2e}
2 \ProvidesPackage{arsclassica}[2012/02/05 v4.0 Customizing
   ClassicThesis (LP)]
3 \RequirePackage{classicthesis}
```

Use of Iwona as font sans serif.

```
4 \renewcommand{\sfdefault}{iwona}
```

Customized chapter numbers.

```
5 \let\chapterNumber\undefined
6 \ifthenelse{\boolean{@eulerchapternumbers}}
7 {\newfont{\chapterNumber}{eurb10 scaled 5000}}%
8 {\newfont{\chapterNumber}{pplr9d scaled 5000}}
```

Small caps sans serif.

```
9 \ifthenelse{\boolean{@minionprospacing}}%
10 {%
11   \DeclareRobustCommand{\spacedallcaps}[1]{\sffamily%
12     \textssc{\MakeTextUppercase{#1}}}%
13   \DeclareRobustCommand{\spacedlowsmallcaps}[1]%
14     {\sffamily\textssc{\MakeTextLowercase{#1}}}%
15 }{%
16   \ifthenelse{\boolean{@pdfspacing}}%
17   {%
18     \microtypesetup{expansion=false}%
19     \DeclareRobustCommand{\spacedallcaps}[1]%
20       {\sffamily\textls[160]{\MakeTextUppercase{#1}}}%
21     \DeclareRobustCommand{\spacedlowsmallcaps}[1]%
22       {\sffamily\textls[80]{\scshape\MakeTextLowercase{#1}}}%
23   }{%
24     \RequirePackage{soul}
25     \sodef\allcapsspacing{\sffamily\upshape}%
26       {0.15em}{0.65em}{0.6em}%
27     \sodef\lowsmallcapsspacing{\sffamily\scshape}%
28       {0.075em}{0.5em}{0.6em}%
29     \DeclareRobustCommand{\spacedallcaps}[1]%
30       {\MakeTextUppercase{\allcapsspacing{#1}}}%

```

```

31     \DeclareRobustCommand{\spacedlowsmallcaps}[1]%
32     {\MakeTextLowercase{\textsc%
33       {\lowsmallcapsspaceing{#1}}}}%
34   }%
35 }

```

Semi-transparent headlines and page numbers in Iwona.

```

36 \renewcommand{\sectionmark}[1]{\markright{\textsc%
37 {\MakeTextLowercase{\thesection}} \spacedlowsmallcaps{#1}}}
38 \lehead{\mbox{\llap{\small\thepage\kern1em\color{halfgray}%
39 \vline}%
40 \color{halfgray}\hspace{0.5em}\headmark\hfil}}
41 \rohead{\mbox{\hfil{\color{halfgray}%
42 \headmark\hspace{0.5em}}}%
43 \rlap{\small{\color{halfgray}\vline}\kern1em\thepage}}}
44 \renewcommand{\headfont}{\normalfont\sffamily}
45 \renewcommand{\pnumfont}{\small\sffamily}

```

Use of Iwona for the titles of sectioning units (chapters, sections, subsections, sub-subsections, paragraphs, subparagraphs) and for the labels of description lists.

```

46 \RequirePackage{titlesec}
47     % parts
48     \ifthenelse{\boolean{@parts}}{%
49     {%
50     \titleformat{\part}[display]
51       {\normalfont\centering\large}%
52       {\thispagestyle{empty}\partname~\thepart}{1em}%
53       {\color{Maroon}\spacedallcaps}
54     }{\relax}
55     % chapters
56     \ifthenelse{\boolean{@linedheaders}}{%
57     {%
58     \titleformat{\chapter}[display]%
59       {\relax}{\raggedleft{\color{halfgray}%
60       \chapterNumber\thchapter} \ \ }{0pt}%
61       {\titlerule\vspace*{.9\baselineskip}\raggedright%
62       \spacedallcaps}%
63       [\normalsize\vspace*{.8\baselineskip}\titlerule]%
64     }{%
65     \titleformat{\chapter}[block]%
66       {\normalfont\Large\sffamily}%
67       {\color{halfgray}\chapterNumber\thchapter%
68       \hspace{10pt}\vline} {10pt}%
69       {\spacedallcaps}}
70     % sections
71     \titleformat{\section}

```

```

72         {\normalfont\Large\sffamily}{\textsc%
73         {\MakeTextLowercase{\thesection}}}%
74         {1em}{\spacedlowsmallcaps}
75 % subsections
76 \titleformat{\subsection}
77         {\normalfont\sffamily}{\textsc{\MakeTextLowercase%
78         {\thesubsection}}}{1em}{\normalsize}
79 % subsubsections
80 \titleformat{\subsubsection}
81         {\normalfont\sffamily\itshape}{\textsc%
82         {\MakeTextLowercase{\thesubsubsection}}}%
83         {1em}{\normalsize\itshape}
84 % paragraphs
85 \titleformat{\paragraph}[runin]
86         {\normalfont\normalsize\sffamily}{\textsc%
87         {\MakeTextLowercase{\theparagraph}}}%
88         {0pt}{\spacedlowsmallcaps}
89 % descriptionlabels
90 \renewcommand{\descriptionlabel}[1]{\hspace*{\labelsep}%
91 \bfseries\spacedlowsmallcaps{#1}}
92 \titlespacing*{\chapter}{0pt}{1\baselineskip}%
93 {2\baselineskip}
94 \titlespacing*{\section}{0pt}{2\baselineskip}%
95 {.8\baselineskip}[\marginparsep]
96 \titlespacing*{\subsection}{0pt}{1.5\baselineskip}%
97 {.8\baselineskip}[\marginparsep]
98 \titlespacing*{\paragraph}{0pt}{1\baselineskip}%
99 {1\baselineskip}
100
101 \newcommand\formatchapter[1]{%
102 \vbox to \ht\strutbox{
103 \setbox0=\hbox{\chapterNumber\thechapter\hspace{10pt}\
104 \vline\ }
105 \advance\hsize-\wd0 \advance\hsize-10pt\raggedright
106 \spacedallcaps{#1}\vss}}
107 \titleformat{\chapter}[block]
108         {\normalfont\Large\sffamily}
109         {\textcolor{halfgray}{\chapterNumber\thechapter}
110         \hspace{10pt}\vline\ }{10pt}
111         {\formatchapter}
112
113 \rofoot[\mbox{\makebox[0pt][l]{\kern1em\thepage}}]{\}

```

Itemize lists with semi-transparent labels.

```

113 \renewcommand\labelitemi{\color{halfgray}$\bullet$}

```

Settings of captions.

```

114 \captionsetup{format=hang,font=small,labelfont={sf,bf}}
115 \captionsetup[table]{skip=\medskipamount}

```

Settings of hyperref.

```

116 \hypersetup{%
117     colorlinks=true, linktocpage=true, pdfstartpage=1,
118     pdfstartview=FitV, breaklinks=true, pdfpagemode=UseNone,
119     pageanchor=true, pdfpagemode=UseOutlines,%
120     plainpages=false, bookmarksnumbered,
121     bookmarksopen=true,%
122     bookmarksopenlevel=1,%
123     hypertexnames=true, pdfhighlight=/0,%
124     urlcolor=webbrown, linkcolor=RoyalBlue,
125     citecolor=webgreen,%
126     hyperfootnotes=false,pdfpagelabels,
127     pdfsubject={},%
128     pdfkeywords={},%
129     pdfcreator={pdfLaTeX},%
130     pdfproducer={LaTeX with hyperref and ClassicThesis}%
131 }

```

Some fine adjustment when the minitoc package is used.

```

132 \@ifpackageloaded{minitoc}
133 {%
134     \MakeLowercase{\gdef\noexpand\ptctitle{\ptctitle}}
135     \MakeLowercase{\gdef\noexpand\mtctitle{\mtctitle}}
136     \MakeLowercase{\gdef\noexpand\stctitle{\stctitle}}
137     \setlength{\mtcindent}{0pt}
138     \renewcommand{\mtifont}{\normalsize\sffamily
139         \scshape\lsstyle}
140 }
141 {}

```

Definition of the `\ctLaTeX`, `\ctLaTeXe` and `\ctTeX` commands, which allow to reproduce respectively the \LaTeX , $\text{\LaTeX}_{2\epsilon}$ e \TeX logos correctly written in Iwona.

```

142 \def\@ppljLaTeX{{\upshape
143     \sbox\z@{\check@mathfonts\fontsize\sf@size\z@%
144     \math@fontsfalse\selectfont A}%
145     \sbox\tw@ T%
146     L\kern-.55\wd\z@
147     \vbox to\ht\tw@{\copy\z@\vss}%
148     \kern-.25\wd0
149     \@ctTeX}}
150 \def\@ppljTeX{{\upshape T\kern -.08em \lower .3ex\hbox{E}%
151 \kern -.08em X}}

```

```

152
153 \def\@ppljscLaTeX{\upshape\scshape
154   \sbox\z@{\check@mathfonts\fontsize\sf@size\z@%
155   \math@fontsfalse\selectfont a}%
156   \sbox\tw@ t%
157   l\kern-.6\wd\z@
158   \vbox to\ht\tw@{\copy\z@\vss}%
159   \kern-.25\wd0
160   \@ctTeX}}
161 \def\@ppljscTeX{\upshape\scshape t\kern -.085em
162 \lower .25ex\hbox{e}\kern -.085em x}}
163
164 \def\@iwonaLaTeX{\upshape
165   \sbox\z@{\check@mathfonts\fontsize\sf@size\z@%
166   \math@fontsfalse\selectfont A}%
167   \sbox\tw@ T%
168   L\kern-.5\wd\z@
169   \vbox to\ht\tw@{\copy\z@\vss}%
170   \kern-.2\wd0
171   \@ctTeX}}
172 \def\@iwonaTeX{\upshape T\kern -.12em \lower .3ex\hbox{E}%
173   \kern -.12em X}}
174
175 \def\@iwonascLaTeX{\upshape\scshape
176   \sbox\z@{\check@mathfonts\fontsize\sf@size\z@%
177   \math@fontsfalse%
178   \selectfont a}%
179   \sbox\tw@ t%
180   l\kern-.5\wd\z@
181   \vbox to\ht\tw@{\copy\z@\vss}%
182   \kern-.2\wd0
183   \@ctTeX}}
184 \def\@iwonascTeX{\upshape\scshape t\kern -.1em
185   \lower .25ex\hbox{e}\kern -.1em x}}
186
187 \def\ct@sc{sc}
188 \def\@ctTeX{\csname @f@family\ifx\f@shape\ct@sc sc%
189 \fi TeX\endcsname}
190
191 \DeclareRobustCommand\ctLaTeX{%
192   \texorpdfstring{\textls[1]{\csname @f@family\ifx%
193   \f@shape\ct@sc sc\fi LaTeX\endcsname}}{LaTeX}}
194 \DeclareRobustCommand\ctLaTeXe{%
195   \texorpdfstring{\textls[1]{\ctLaTeX\csname @\ifx%
196   \f@shape\ct@sc sc\fi twoe\endcsname}}{LaTeX2e}}
197

```

```

198 \def\@twoe{\kern.1em$\m@th2_{\textstyle\varepsilon}$}
199 \def\@sctwoe{\kern.15em$\m@th{\scriptscriptstyle2}%
200 _\varepsilon$}
201
202 \DeclareRobustCommand\ctTeX{%
203   \texorpdfstring{\textls[1]{\@ctTeX}}{TeX}}
204
205 \def\toc@headingbkORrp{%
206   \def\toc@heading{%
207     \chapter*{\contentsname}%
208     \@mkboth{\spacedlowsmallcaps{\contentsname}}
209     {\spacedlowsmallcaps{\contentsname}}}}
210 \@ifclassloaded{scrreprt}{\toc@headingbkORrp}{}
211 \@ifclassloaded{scrbook}{\toc@headingbkORrp}{}

```


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